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ABSTRACT

The project, conducted in five schools enrolling approximately 3,700 students, has as its goals: (1) develop and implement a pilot program of career guidance and counseling at the elementary school level emphasizing career awareness, (2) improve guidance and counseling service at the junior high school level emphasizing career exploration, (3) improve guidance and counseling at the senior high school level and establish a placement service. To achieve these goals, a graduate counseling fellow was assigned to the one elementary school in the project, three fellows were assigned to the three middle schools, and a graduate counseling fellow, a placement officer, and a secretary were assigned to the secondary school. In addition a graduate research fellow served the overall project and five students enrolled in a Cooperative Office Education course were assigned to assist the graduate students. Among the results of the program were the development of a volume of activities for instructional procedures, slides and audio tapes, a model for career guidance at each of the three levels, a core of trained personnel, and placement information and services. The project has been successful in view of the objectives established. (Questionnaires, tables, and aids for curriculum development constitute a large portion of the volume.) (AG)

ED 089062

FINAL REPORT

Project No. V261029L
Grant No. OEG-0-72-0725

Submitted by:
Calcasieu Parish School Board

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FINAL REPORT

Project No. V261029L
Grant No. OEG-0-72-0725

Submitted to
La. State Department of Education
Louis Michot, Superintendent

Submitted by
Calcasieu Parish School Board
Dr. Paul J. Moses
Superintendent of Schools

Under the direction of
Mr. Frank W. Jernigan, Jr.
Assistant Superintendent
Curriculum & Instruction

CE 001 112

FINAL REPORT

Project No. V261029L
Grant No. OEG-0-72-0725

Research and Development Project in Career Education

Conducted Under
Part C of Public Law 90-576

Dr. Thomas Clausen
Assistant Superintendent
Instructional Services
State Department of Education
P.O. Box 44064
Capitol Station
Baton Rouge, Louisiana 70804

August 31, 1973

FINAL REPORT

Project No.: V261029L
Grant No.: OEG-0-72-0725

Research and Development Project in Career Education

Conducted Under
Part C of Public Law 90-576

The project reported herein was performed pursuant to a grant from the Bureau of Adult, Vocational, and Technical Education, Office of Education, U. S. Department of Health, Education, and Welfare. Grantees undertaking such projects under Government sponsorship are encouraged to express freely their professional judgment in the conduct of the project. Points of view or opinions stated do not, therefore, necessarily represent official Office of Education position or policy.

Dr. Thomas Clausen
Assistant Superintendent
Instructional Services
State Department of Education
P.O. Box 44064
Capitol Station
Baton Rouge, Louisiana 70804

August 31, 1973

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SUMMARY OF THE REPORT

RESEARCH AND DEVELOPMENT IN CAREER EDUCATION

PROJECT #V261029L

Summary of the Report

Time period covered by the report. This report covers the entire project period which was January 10, 1972 through August 31, 1973. Notification of the Grant was received by the Calcasieu Parish School Board in a letter from Dr. Paul B. Brown dated January 25, 1972.

Goals and objectives of the project. The original proposal for this project that was addressed to United States Commissioner of Education, Dr. S. P. Marland, Jr., dated October 11, 1971, outlined on page two (2) the following needs in the field of vocational education at three levels of the educational system of Calcasieu Parish. Listed as needs the proposed project goals and objectives were as follows: "(1) develop and implement a pilot program of career guidance and counseling at the elementary school level which was designed to increase the career awareness of students in terms of the broad range of options open to them in the world of work; (2) improve the guidance and counseling services at the junior high school level with particular emphasis being given to career exploration in the junior high schools; and, (3) improve guidance and counseling services at the senior high school level and establish a placement service to insure the placement of all exiting students in either a job, a post-secondary occupational or baccalureate program."

Procedures followed. The goals and objectives of this project were met utilizing the services of a placement officer, secretary, and six graduate students. The placement officer and secretary were employed as full-time employees. The six graduate students were employed on a half-time basis. Five students enrolled in a Cooperative Office Education course were employed on a part-time basis to assist the graduate students.

The Research and Development Project in Career Education was structured into three basic components. The components were structured at the elementary level, middle school [junior high] level, and secondary level.

Personnel were assigned to the three component levels as follows: (1) one graduate counseling fellow assigned to one elementary school; (2) three graduate counseling fellows assigned to three middle schools; (3) one graduate counseling fellow, one placement officer, and one secretary assigned to one secondary school; (4) one graduate research fellow assigned between the five schools; and (5) five C.O.E. students assigned in a one to one correspondence with the five project site schools.

The project was based upon the premise that the graduate counseling fellows would establish functional career guidance and counseling services. These services were rendered through the following activities at each level concurrent with the school year: (1) group and individual counseling sessions with students wherein the theme was career education; (2) group and individual planning sessions with teachers for the purpose of developing career education instructional activities; (3) selection, securing, and demonstrating various materials to implement career education; (4) establishment of a placement service for exiting students; and, (5) research activities designed to supply data regarding student interest, student educational skill development, and student ability levels.

The aforementioned activities followed a nine (9) week independent study session by the placement officer and graduate fellows. These study sessions provided direction as well as a philosophical approach to career education for the project in Calcasieu Parish.

Counseling in-service activities were conducted for counselors outside the project site wherein a theme of career guidance was emphasized. These sessions established a locus from which a viable career counseling program would be initiated.

Results and Accomplishments. In a simple form, the Research and Development Project in Career Education provided the following results: (1) a volume of activities for instructional procedures incorporating career education theme entitled, "Aids for Career Education Curriculum Development"; (2) slides and audio tapes that provide a focal point for teacher creativity and career education; (3) a model for career guidance at the elementary, middle, and secondary schools; (4) a core of trained and informed personnel to utilize in establishing a career education program district-wide; (5) placement information and services for the exiting student; and, (6) information regarding student interest, intelligence, and achievement as these indices relate to student course selection and occupational choice.

Non-instructional related accomplishments are denoted as follows: (1) a group of graduate students informed about career education as a result of project assigned graduate students being enrolled in the same classes at McNeese State University; (2) an improved relationship between the schools and business and industry; (3) a community that is informed to some degree about career education as a result of speaking engagements and press coverage; (4) a core of counselors that are re-directing their energies into a career guidance program; and, (5) a group of McNeese State University professors who appear ready to embark on a new course of instruction embracing career education for the 1973-74 session.

Evaluation. A complete evaluation of the influences of the Research and Development Project in Career Education is not possible at this point of time. However, components of the project which can be evaluated indicate that the project activities have been very successful. The models at three levels related to career guidance activities have met and will continue to meet the needs of students in an improved fashion. The first structured placement component was established, and this program has been termed successful. Aids for career education curriculum development were structured to enhance and influence the existing curriculum. Initial group and individual career counseling activities have provided students with a focal point in terms of class work and preparation for life as a result of this program..

To continue to delineate the success and first occurences provided by this project would be redundant. It can be said that the project has been successful in view of the objectives established without equivocation. The future success of the students enrolled in the Calcasieu Parish Schools will provide the final evaluation of this project.

Conclusions and Recommendations. A Research and Development Project in Career Education has provided the impetus for a district-wide program focusing on the concept of career education in Calcasieu Parish. The State of Louisiana's Education Department has launched out on a full career education program for the 1973-74 school year. Calcasieu Parish, as a result of the Research and Development Project, has been placed in a position of leader with regard for the State Plan for Career Education. The project has enabled Calcasieu Parish to focus on a district-wide program and accept leadership responsibilities in the new state program.

Many recommendations could be cited. However, one concept appears to emerge. The emerging recommendation concerns the time period of the Grant. It is recommended that the Grant be established for a minimum of three years concurrent with the district's fiscal calendar. The first year should be geared toward a functional career education program. The second year should be utilized to establish or restructure the objectives in terms of the problems which may be encountered. The third year should provide data in terms of results that are relatively concrete. This three-year plan would provide enough time to change instructional staff and community attitudes that may not be congruent with those of the project.

BODY OF THE REPORT

RESEARCH AND DEVELOPMENT IN CAREER EDUCATION

PROJECT #V261029L

SECTION 6a

PROJECT DIRECTION

PROJECT DIRECTION

This project was directed toward the student oriented problem of improving the vocational education areas of career awareness, career exploration, career decision-making, selection of an occupational area (s), and selection of curricula to facilitate training toward a selected occupational area. This problem area, by its inherent nature, affects three levels of the educational system operated under the direction of the Calcasieu Parish School Board, Lake Charles, Louisiana.

Three levels of the educational system have resulted due to student growth and development which necessitates the separation of vocational education and career activities along a continuum from grades one (1) through twelve (12). These arbitrary divisions provide for the proposed treatment of the problem of developing the career education areas of career awareness, career exploration, career decision-making, selection of an occupational area (s), and selection of curricula to facilitate training toward a selected occupational area at three levels. The levels of the educational system affected by the problem are named as follows in the Calcasieu Parish School System. The levels are: (1) elementary levels, grades one (1) through five (5); middle school level, grades six (6) through eight (8) [junior high]; and, (3) secondary level, grades nine (9) through twelve (12).

The original proposal for this project that was addressed to United States Commissioner of Education, Dr. S. P. Marland, Jr., dated October 11, 1971, outlined on page two (2) the following needs in the field of vocational education at three levels of the educational system in Calcasieu Parish. Listed as needs the proposed project functions were to: " (1) develop and implement a pilot program of career guidance and counseling at the elementary school level which will be designed to increase the career awareness of students in terms of the broad range of options open to them in the world of work; (2) improve the guidance and counseling services at the junior high school level with particular emphasis being given to career exploration in the junior high schools; and (3) improve guidance and counseling services at the senior high school level and establish a placement service to insure the placement of all exiting students in either a job, a post-secondary occupational or baccalaureate program."

The elementary component of this project was directed toward the problem area of supplying career and vocational information to elementary students. This component follows the career development theories of Roe, Holland, and Super. If the studies and experiments in the area of career development and choice by Roe, Holland, and Super are valid, then it appears that elementary students need information regarding the world of work and careers in order to make intelligent and realistic decisions with regard to academic and vocational preparation concerning their entry into the work force.

Heretofore, career guidance and counseling has followed the Parsonian concept of disseminating information about the world of work to students enrolled at the secondary level. The elementary function of this project places emphasis on incorporating the Parsonian concept at the elementary grade levels. This function is in agreement with career development theories inasmuch as this project at the elementary level was directed toward providing information dissemination sessions about the world of work through curriculum components, large group guidance and counseling, and individual guidance and counseling. These processes provided the student population with information about the world of work from which decisions about careers could be based.

The project function at the elementary level was focused on career awareness dissemination activities with emphasis on the career guidance component, rather than emphasis on personal problem counseling. This is not to say that personal problems and needs of students were ignored, but this element was not a major premise in this project.

The middle school component of this project was directed toward the problem areas of improving and initiating the following functions. The functions are: (1) guidance and counseling services at the middle school level; (2) place emphasis on instructional and special activities to enhance career exploration; (3) develop career decision-making techniques; and, (4) develop the student's ability to select an occupational area congruent with his aptitude and interest.

Major emphases of the middle school program were placed on the problem of developing activities to disseminate world of work information through hands-on experiences and exploration into the occupations categorized in the fifteen cluster concept. Career decision-making and alignment of aptitudes, interest, and ability were perpetuated in the problem area of improving the career and vocational aspects of the guidance program. Career awareness continued to be a problem at which this project was directed at the middle school level.

The high school component of this project was directed toward the problem area of facilitating the selection of an occupational area, selecting curricula to provide training toward a selected occupational area, and techniques of securing employment. A minor premise of this function was to provide continued career awareness and exploration at the secondary school level.

Correlated with the high school component was the problem area of placement. The placement component was directed toward securing and maintaining information about availabe jobs and placing students, either graduates or other exiting students, into a job.

REVIEW OF RELATED LITERATURE

Numerous studies presented in educational literature were related to this project in varying forms. Structured into categories on the basis of content, these studies dealt with student selection, prediction of student performance, and test validation in prediction. Numerical quality was found to be greater in the category of studies considering prediction of student performance, and the least number of studies appeared in the category of student selection.

One of the studies involving predicting success was conducted by Donald Racky in a work entitled, "Predictors of Ninth Grade Woodshop Performance From Aptitude and Interest Measures."[1] Evolution of a formula that would predict a student's success in shop was attempted from an intercorrelation of forty three variables in this study. The forty-three variables used in this study were obtained from the Kuhlmann-Anderson Interest Test, SRA-Primary Mental Abilities Tests, MacQuarrie Test of Mechanical Ability, SRA-Mechanical Aptitude Test, Kuder Preference Record, and Garretson and Symonds Interest Questionnaire for High School Students. Racky found that the level of significance of the predictive value obtained from the results of these tests was not great enough to use the criteria in selecting or eliminating pupils from a program, but the data collected from the study were of diagnostic value to the teacher.[2]

Kuder Preference Record results obtained from eighty veterans who enrolled in a skill training program at the Michigan Veterans Vocational School were studied in an attempt to determine whether or not students with higher Scientific ratings and lower Persuasive and Literary ratings were more successful in the vocational school than students with opposite ratings.[3]

---

[1] Donald Racky, "Prediction of Ninth Grade Woodshop Performance From Aptitude and Interest Measures," Educational and Psychological Measurement, XIX (Winter, 1959, 629.

[2] Racky, p. 636.

[3] Joseph J. Motto, "Interest Scores in Predicting Success of Trade School Students," Personnel and Guidance Journal, XXXVI (April, 1959), 538.

From this study Motto found that the difference in the ratings on the Kuder Preference Record did not differentiate among students who would complete a vocational program successfully from the total group entering the program. However, in contrast to the general population, "Vocational school trainees tend to produce a resulting profile which is characterized by a flatness and an absence of scores which fall beyond the highest and lowest quartiles."[4]

In a work related to Motto's study, Samuelson attempted to determine if a correlation existed between the resulting measures of the Kuder Preference Record and teacher judgment of student performance in a vocational school program.[5] A correlation between student rankings as assigned by teachers and numerical data on the scales of the Kuder Preference Record indicated that a statistically significant relationship did exist between the measures at the .99 confidence interval. The Scientific, Persuasive, and Literary Scales of Kuder Preference Record appeared to be useful for predictive purposes.[6]

Superior predictive accuracy appeared as the result of an investigation attempting to predict major trade group membership from data obtained from students enrolled in a vocational high school. This study was longitudinal in nature wherein ninth grade students were administered the Minnesota Vocational Interest Inventory; and later, ratings on the inventory were correlated with actual occupational choice selection. After the data were statistically analyzed by a multivariate technique, the inventory patterns emerged in the large trade curricula areas.[7]

Summarizing data on the validity of aptitudes and school achievement for the prediction of success in vocational education programs, Prediger, Waple, and Nusbaum reported on thirty-eight studies using cognitive or motor ability predictors. The authors reached the following conclusions.

---

[4] Motto, p. 676.

[5] Cecil O. Samuelson, "Interest Scores in Predicting Success of Trade School Students," Personnel and Guidance Journal, XXXVI (April, 1958), 538.

[6] Samuelson, p. 540.

[7] Harvey A. Silver and W. Leslie Barnette, Jr., "Predictive and Concurrent Validity of the Minnesota Vocational Interest Inventory for Vocational High School Boys," Journal of Applied Psychology, LIV (October, 1970), 436-440.

> 1. . . . there is considerable variation in the level of correlation obtained for a given predictor within a given vocational area.
>
> 2. The predictability of success appears to be much greater in some vocational areas than in others.
>
> 3. . . . the frequent observation that academic grades of girls are more predictable than those of boys would appear to hold for vocational courses.
>
> 4. The effectiveness of a given predictor varies from area to area.
>
> 5. Using IQ as the sole objective predictor of vocational school success would appear to be very unfair to many students.[8]

The foregoing conclusions were categorical results obtained from original investigations.

Correlations presented in the thirty-eight studies reviewed by Prediger, Waple, and Nusbaum numbered over twelve hundred. The authors summarized the twelve hundred correlations for ten predictors and eleven vocational areas. The results of the twelve hundred correlations studied were summarized into four trends as follows:

> Main trends include (a) substantial variation in results from study to study; (b) differences in level of predictor-criterion r among vocational areas and between males and females; (c) evidence of differential predictability; and, (d) poor performance of dexterity tests.[9]

Intelligence scores and other data have been used to predict academic success. Correlation coefficients and predictive equations have been determined for many of the disciplines in the academic curriculum as was shown by the following study.

---

[8] Dale J. Prediger, Charles C. Waple, and Gerald R. Nusbaum, "Predictors of Success in High School Level Vocational Education Programs: A Review, 1954-1967." Personnel and Guidance Journal, XLVII (October, 1968), 137-142.

[9] Prediger, Waple, and Nusbaum, p. 142-143.

In a study entitled "Aptitude and Achievement Measures In Predicting High School Academic Success," James Jacobs used aptitude, English and arithmetic proficiency, and mental ability ratings at the eighth grade level and grade averages and achievement at the eleventh grade level in an attempt to construct a tool for decision making.[10] Speaking about the purpose of and criteria used in this study Jacobs reported:

> This study was inaugurated to evaluate the effectiveness of certain aptitudes and achievement tests in predicting academic success in the Cincinnati public high schools, since curricular, administrative, and instructional decisions are often based on information of this kind.[11]

In the final report of this longitudinal study Jacobs inferred that arithmetic proficiency at the eighth grade level was a predictor of grade point average in academic subjects at grade eleven, while vocational course success was not as predictive from this data.[12]

In a study designed to determine predictors of grades in occupational and academic curricula at the community college level, Baird reported results in direct conflict with Jacobs' conclusion. Brade wrote:

> Optimally weighted combinations of aptitude and achievement predictors were found to predict grades for occupational curricula with the same accuracy as they predict grades in academic curricula. For women, however, the aptitude test scores correlated much less with grades in occupational curricula than with grades in academic curricula.[13]

An explanation of the above conflicting reports with regard to predictors involved two points. One reason for the difference in reliability of the predictors could have been attributed to differences in sample composition with regard to the number of women. Another reason for the conflicting reports was set forth in the conclusion of a study by Hascall. In reporting on a study completed in New York, Hascall said, "The fact that a measure did not seem to hold predictive validity for White Plains should not, of course, deter him [an investigator] from examining that factor in his situation."[14]

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[10] James N. Jacobs, "Aptitude and Achievement Measures in Predicting High School Academic Success," Personnel and Guidance Journal, XXXVII (January, 1959), 340.

[11] Jacobs, p. 334.

[12] Jacobs, p. 341

[13] Leonard L. Baird, "The Prediction of Grades in Occupational and Academic Curricula in Two-Year Colleges," Journal of Educational Measurement, VI (Winter, 1969), 247.

In forming another conclusion about the study conducted in White Plains, Hascall reported:

> Another conclusion which seems reasonable from the results of the study is that certain combinations of two or more predictors will provide greater predictive validity than will any one predictor alone.[15]

Some investigators have moved beyond the realm of citing conflicts between the conclusions established by studies to a position of questioning the use of educational measures as predictors of vocational success. One such report was recorded by Steven Cox. The purpose of Cox's study was to determine if a correlation existed between academic success in a vocational program and vocational success as an employee. Reporting the results of this study Cox concluded:

> For many years, there seems to have been general agreement among individuals involved in education that measures useful in the prediction of educational success do not show this same usefulness in the prediction of vocational success. The results of this investigation appear to lend support to this premise.[16]

Droppelt, Seashore, and Odgers made a statement encompassing the idea set forth by Cox as they wrote: "There is considerable amount of uncertainty as to the usefulness of tests in selecting students for vocational courses and for advising students . . ."[17]

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[14] Edward O. Hascall, "Predicting Success in High School Foreign Language Study," Personnel and Guidance Journal, XL (December, 1961), 367.

[15] Hascall, p. 366.

[16] Steven G. Cox, "Do Educational Measures Predict Vocational Success?," Vocational Guidance Quarterly, XIX (June, 1971), 271-273.

The negation of the foregoing statement was established in the conclusion of the same article wherein the premise was set forth as Droppelt, Seashore, and Odgers reported the results of a study attempting to validate an aptitude test. The conclusions of the aptitude study were:

> . . . the trait most readily predicted for Auto Mechanics students is Understanding Trade Information. Not only the Spelling scores, but scores on Sentences, Numberical Ability, and Abstract Reasoning could be of some help in estimating future success on this trait. In practice, the most accurate estimates can be expected for those students who score either high or low on the four tests noted above.[18]

Continuing to report the results of the aptitude test study, Droppelt, Seashore, and Odgers stated:

> . . . the sum of scores on Abstract Reasoning, Space Relations, and Mechanical Reasoning is recommended as a useful predictor of how Machine Shop students will perform in their course of study.[19]

These deductions appeared to support the idea that performance, success, and selection of students could be made from educational measures.

The process of using aptitude measures as indicators of students' behavior was supported in the conclusions of a study conducted by Joseph Impellitteri and Jerome Kapes. In writing the report of a longitudinal study of aptitude measures and vocational course grades obtained from a group of secondary students, Impellitteri and Kapes stated:

> . . . the GATB is more valid for predicting achievement in certain specific area of vocational

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[17] Jerome E. Droppelt, Harold G. Seashore, and John G. Odgers, "Validation of the Differential Aptitude Tests for Auto Mechanics and Machine Shop Students," Personnel and Guidance Journal, XXXVII (May, 1959), 650.

[18] Droppelt, Seashore, and Odgers, p. 651.

[19] Droppelt, Seashore, and Odgers, p. 651.

> and technical training rather than in the broad range of vocational and technical education.[20]

A descriptive study was completed using data accummulated at the elementary level in an attempt to establish charts that would predict student behavior at the junior high level. In developing these charts for determining junior high success based on correlations between kindergarten intelligence scores and scores of academic success in junior high, Gnauck and Kaczkowski reported low significance after cross validation. However, the charts proved useful for teachers, because "They consistently predicted success or failure at the extremes of the distribution."[21]

Henry E. Garrett, in writing about the value of prediction, stated:

> We can often predict from a batter of aptitude tests the probable success of an individual who plans to enter a given trade or profession. Advice on such a basis is measurable better than subjective judgment.[22]

Doerr and Ferguson conducted a study entitled, "The Selection of Vocational-Technical Students."[23] This investigation edamined the relationship between vocational ratings on standardized instruments and actual course selection. Measurably different traits were found to exist between vocational student groups. In the conclusion the authors stated:

> In view of the findings of the present study it seems safe to conclude that discriminate equations can be generated which will aid in classification of vocational-technical students according to group

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[20] Joseph T. Impellitteri and Jerome T. Kapes, "Using the GATB with Vocational or Technical Bound Ninth Grade Boys," Vocational Guidance Quarterly, XVIII (September, 1969), 63.

[21] Johanna Gnauck and Henry Kaczkowski, "Prediction of Junior High School Performance," Educational and Psychological Measurement, XXI (Summer, 1961), 448-488.

[22] Henry E. Garrett, Statistics in Psychology and Education (6th ed., New York: David McKay Company, Inc., 1966), p. 160

[23] J. Joseph Doerr and John L. Ferguson, "The Selection of Vocational-Technical Students," Vocational Guidance Quarterly, XVII (September, 1968), 27.

resemblance by using aptitude and interest variables.[24]

Continuing, Doerr and Ferguson issued a warning as they wrote:

> Guidance workers must be cautioned, however, that work must continue on the identification of variables which are in fact related to given vocational-technical courses or vocational groups.[25]

After a review of the studies related to success in trade and vocational school courses, Patterson wrote, " . . . apparently few trade schools, public or private, use any selection procedure in admitting applicants."[26] Several reasons were cited as explanations for this condition. Patterson wrote, "One probable reason is the variation among trade schools in the nature, extent, and level of curricula."[27] Continuing he stated:

> Another reason is probably the fact that trade schools, unlike colleges, do not have staff members who are interested in or capable of doing such research as is necessary. Also, many schools, particularly the proprietary schools, are probably not concerned about selection procedures, since they are interested in anyone who can pay the fees.[28]

Some students are selected for the public vocational school. "Students are frequently assigned to vocational schools or trade classes because of failure to adapt to the academic curriculum."[29]

Studies by Baird, Doerr and Ferguson, and Garrett, as well as others, indicated that idices of success could be ascertained. Patterson, agreeing with this ideology, wrote:

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[24] Doerr and Ferguson, p. 32.

[25] Doerr and Ferguson, p. 32

[26] C. H. Patterson, "Predicting Success in Trade and Vocational School Courses: Review of the Literature," Educational and Psychological Measurement, XVI (Autumn, 1956), 352.

[27] Patterson, p. 352.

[28] Patterson, p. 353.

[29] Patterson, p. 353.

It appears that if and when public and private vocational and trade schools desire to select those students most likely to succeed, it should be possible to do so with some success. It will, of course, be necessary for each school to determine its own selection procedure, in terms of critical scores, in relation to the nature, level, and purposes of its training program. There is an apparent need for well designed, controlled studies utilizing an adequate number of subjects.[30]

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[30] Patterson, p. 391.

BODY OF THE REPORT

RESEARCH AND DEVELOPMENT IN CAREER EDUCATION

PROJECT #V261029L

SECTION 6b

OBJECTIVES

BEHAVIORAL OBJECTIVES FOR CALCASIEU PARISH'S CAREER EDUCATION RESEARCH AND DEVELOPMENT PROJECT

I. Behavioral Objectives

General:

1. The graduate fellows will conduct forty independent research sessions four hours each, to obtain a repertory of career education of information during the course of the Summer Semester 1972.
2. Each graduate counseling fellow will establish a counseling office and career education resource room at the project site school wherein he is assigned prior to the opening of the 1972-73 school session.
3. The graduate fellows will conduct eight (encompassing one hour) inservice meetings at each of the project site schools in the course of the first semester of the 1972-73 academic year.
4. The graduate counseling fellows will conduct individual meetings with each teacher once per six-weeks' reporting period for the purpose of career education resource and implementation.
5. Each graduate fellow will serve as a consultant to the teaching staff in terms of implementing career education concepts into the existing curriculum.
6. Each graduate counseling fellow will structure a schedule wherein he will be available one (1) hour per day each week for the purpose of individual counseling.
7. A Vocational Guidance Workshop will be scheduled over fifteen months, six hours per month, for the purpose of inservice training related to familiarization with career development theory and an exploration of the world of work.
8. Design a model in the academic year 1972-73 to predict what percentage of the middle school population would select a technical and industrial training program upon reaching the secondary level of education.

Elementary:

9. The elementary graduate counseling fellow will conduct twenty career guidance group sessions (two (2) per class for grades 1-5) in the first semester of the 1972-73 school year for the purpose of information dissemination to students about the role of the career education guidance counselor.

10. The elementary graduate fellow will act as a consultant as each elementary teacher teaches five lessons in each of the following areas. The areas will be:

    A. Lessons focusing on the interest and abilities of the children as an element of the importance of each individual.

    B. Lessons with a theme concerning the relationship of the child to his family group.

    C. Lessons with emphases on the relationship of a child to his neighbors and neighborhood.

    D. Lessons related to the dignity and value of work.

    E. Lessons related to the careers of people in the local community.

    F. Lessons emphasizing the world of work and occupational information.

    G. Lessons which expose students to the fifteen occupational clusters.

11. A pre and post questionnaire survey related to the world of work will be administered by the graduate counseling and research fellows and marked by the students in the first and second semesters of the 1972-73 academic year.

Middle School:

12. The middle school counseling fellows will serve each class of students as they visit the career education resource room twice each six-weeks' period for a sixty minute period for the purpose of information dissemination about occupations in the fifteen clusters and the world of work.

13. The middle graduate counseling and research fellows will collect data on the students enrolled in the project site middle schools pertaining to achievement, intelligence, and interest area.

14. The middle school graduate counseling fellows will develop a model for guidance and counseling at the middle school level.

High School:

15. The secondary graduate counseling fellow will schedule each class of students into the testing room for at least one sixty minute visit to disseminate information about the world of work.

16. The secondary graduate counseling fellow will schedule visits to classes in each department area for the purpose of disseminating information about the relationship of 'said' department to the world of work.

17. The secondary graduate counseling fellow will conduct five group meetings with each subject area faculty team for the purpose of establishing a career education curriculum design.

18. The secondary graduate counseling and research fellows will collect data on the students enrolled in the project site school pertaining to: (1) achievement levels; (2) intelligence; (3) interest areas; and, (4) first, second, and third career choices.

GENERAL EDUCATIONAL AND INSTRUCTIONAL GOALS AND DEVELOPMENT OBJECTIVES FOR CALCASIEU PARISH'S CAREER EDUCATION RESEARCH AND DEVELOPMENT PROJECT

I. General Educational and Instructional Goals

A. To develop in pupils attitudes about the personal and social significance of work.

B. To develop each pupils' self-awareness of his interests, needs, and abilities.

C. To develop and expand the occupational awareness and aspirations of pupils.

D. To improve overall pupil performance by unifying and focusing basic subjects around a career development theme.

E. Introduce the single and unifying concept of career education into all offerings for all students and all levels.

F. To assist students through counseling, in evaluating their interests, abilities, values and needs as they relate to occupational roles.

G. To provide students with opportunities for detailed exploration of selected occupational clusters (including hands-on-laboratory experience and work experience), leading to the tentative selection of a particular cluster of occupations for in-depth exploration in the ninth grade.

H. To improve the performance of students in basic subject areas by making subject matter more meaningful and relevant through focusing it on a career development theme.

I. To provide in-depth exploration and training in one cluster of occupations, leading to entry-level skill in one occupational area and providing a foundation for further progress, leaving open the option to move between clusters of occupations if desired.

J. To provide guidance and counseling to assist students in selecting an occupational specialty for grades 11 and 12, with the following options: intensive job preparation, preparation for post-secondary occupational programs or preparation for a four-year college.

K. To provide every student intensive preparation in a selected occupational cluster, or in a specific occupation, in preparation for job-entry and/or further education.

L. To increase the student's motivation to learn by relating his studies to the world of work.

M. To provide intensive guidance and counseling in preparation for the student's employment and/or further education.

N. To insure placement of all students in a job, post-secondary occupational education or a four-year college.

II. Developmental Objectives

A. Objectives of the Elementary School

1. To Develop Career Awareness by Structuring Units

   (a) To acquire a knowledge of home and school related career performance and to identify the relationships of home and school careers as they relate to the functioning of the community.

   (b) To acquire a knowledge of careers necessary for the maintenance of the community and to recognize the interdependency of these careers and to identify and extend similarities of local careers to careers in general.

   (c) To classify various careers into groups based upon similarity of career performances and recognize the impact of various career clusters on life styles.

2. Develop Self Awareness by Planning

   (a) To identify the rights and responsibilities of the learner within the family and the school environment, and to acquire a knowledge of learner's rights and responsibilities as a worker and how this relates to careers.

   (b) To recognize the importance of "self" as an individual and as a worthy member of a group, and to recognize individual capabilities and limitations as they relate to individual roles.

(c) To develop attitudes about learning tools and to recognize the value of these tools in fulfilling individual roles, and to insure the development of proficiency in educational skills as an aid for individual success.

3. Develop Appreciations and Attitudes by Structuring Activities

   (a) To recognize the importance of each individual in the functioning of the family, and to participate and develop appreciation for the roles of all individuals in the environment.

   (b) To identify and relate the contributions made by each member of the community to the learner and to others.

   (c) To develop an awareness of wage earner's occupation and his importance to the family, and to acquire a realistic view of the working roles.

4. Develop Decision Making by Structuring Units

   (a) To develop an awareness of cause and effect relationships in decisions made in the learner's life.

   (b) To develop an awareness of the consequences of personal decisions.

   (c) To identify in a formal sense the components of a decision-making process.

   (d) Apply the decision-making process to school related problems.

5. Develop An Economic Awareness by Structuring Activities

   (a) To develop an awareness of exchange of goods, and to develop a workable knowledge of our monetary system.

   (b) To become aware of the complexity of production and distribution of goods and services, and to become aware of the law of supply and demand.

6. Develop Skill Awareness Beginning Competence By Structuring Lesson Plans

    (a) To be aware that different careers require the use of different tools, and to be aware that school is a career that requires proficiency in basic skill areas.

7. Develop Employability Skills by Correlating Activities

    (a) To recognize the need to share and cooperate for the attainment of goals, and to demonstrate the ability to cooperatively develop rules, accept direction, and responsibility.

    (b) To simulate interaction styles that facilitate individual and organizational goals, and to recognize how adaptability may resolve the personal conflict that may exist between individual and organizational goals.

    (c) To see the relationship between the school environment and the larger society and their need for structure and order.

8. Develop Educational Awareness Necessary

    (a) To acquire a knowledge of roles existing in the home and parallel roles existing in the learner's school environment, and to recognize similarities and differences within home roles and between home and school roles.

    (b) To recognize the relationship between basic skill development and various identifiable life roles within the community, and to understand the relationship between the similarities and differences of life roles and learned skills.

    (c) To identify strengths and weaknesses of an individual's life role as related to his peer group interaction, and to identify the relationship between an individual's life role, his environment, and the role of selected adults.

B. Objectives For the Middle School

1. To develop career awareness through identifying, developing, and evaluating the learner's abilities, interests, attitudes, and values; and relating these to the requirements of the various career clusters.

2. To develop self-awareness - personal strengths and weaknesses, talents, interest - and evaluating these perceptions against career cluster requirements.

3. To develop appreciations and positive attitudes toward the world of work through recognition of the inter-relation of many occupations, possible avenues for growth and development, and the need for making meaningful individual choices.

4. To develop confidence in decision making by applying the process to family and social problems; weighing both long and short range consequences of different alternatives.

5. To develop economic awareness in understanding the principle that specialization creates an interdependent society; and to develop the concept of management of financial resources and the concept of economic potential, as they relate to different career clusters.

6. To develop skill awareness in demonstrating research processes and tools to promote understanding in how simple machines are used to produce more complex machinery, to practice beginning competency for research skills in areas of physical and social sciences, home-making, crafts, and construction.

7. To develop employability skills to observe how the learner functions in society brings an increase in personal satisfaction, group achievement and morale in relating social and personal interaction skills to employability and to reassess personal and social interaction skills and to further develop a plan for continual growth.

8. To develop educational awareness in recognizing how learning to perform a task parallels learning that enables an adult to accomplish his tasks; to develop techniques to identify and judge values relating to life roles; and to identify life roles and contributing conditions.

C. Objectives of the Secondary School

1. Develop Career Awareness by Structuring Units

   (a) To study and select for in-depth exploration a career cluster based upon student's interests, values, and abilities.

   (b) To identify the further requirements of his selected career and to reassess his abilities, interests, and attitudes of his anticipated life role.

2. Develop Self-awareness by Planning Units

   (a) To recognize the relationship between personal values and the influence of significant others upon his career.

   (b) To develop self awareness and self confidence in his anticipated career choice.

3. Develop Appreciation of Attitudes by Structuring Activities

   (a) To explore and analyze attitudes and awareness concerning specific job clusters and the importance they have in an on-going society.

   (b) To take part in specific tasks within the job cluster (s) the individual has chosen so as to develop an appreciation and awareness of the specific skills required.

4. Develop Decision Making Structuring Units

   (a) Apply the decision making process in formulating a plan for the in-depth study of three career clusters - then one career selection for identification of a tentative career.

5. Develop Economic Awareness by Structuring Activities

   (a) To develop an ability to handle the tools of business so that the student can read and interpret intelligently those tables, graphs, and other presentations which are directed to him as a consumer and citizen.

6. Develop Skill Awareness and Beginning Competence Structuring Lesson Plans

    (a) To match his abilities and interests with career clusters considering the skills and processes needed - and to maintain District Guidelines for basic skill subjects.

7. Develop Employment Skills by Correlating Activities

    (a) To identify and demonstrate job acquisition skills and to identify a minimum of three viable alternatives for career placement.

8. Develop Educational Awareness Necessary

    (a) To choose and plan for the acquisition of the necessary remaining skills for his anticipated life role.

BODY OF THE REPORT

RESEARCH AND DEVELOPMENT IN CAREER EDUCATION

PROJECT #V261029L

SECTION 6c

PROJECT DESIGN

PROJECT DESIGN

Calcasieu Parish's Career Education Research and Development Project was structured into a four component design. The names of the basic components were as follows: (1) elementary level, grades 1-5; (2) middle school [junior high] level, grades 6-8; (3) secondary level, grades 9-12; and, (4) placement service. In association with the elementary, middle school, and secondary components was a functional research element.

The purpose of the Career Education Research and Development Project's four component design was to develop a procedure wherein the student's concept of career awareness, career exploration, career decision-making, selection of an occupational area (s), selection of curricula to facilitate training toward a selected occupational area could be improved. These concepts were to be improved through the following procedures: (1) develop and implement a pilot program of career guidance and counseling at the elementary school level which will be designed to increase the career awareness of students in terms of the broad range of options open to them in the world of work; (2) improve the guidance and counseling services at the junior high school level with particular emphasis being given to career exploration in the junior high schools; and, (3) improve guidance and counseling services at the senior high school level and establish a placement service to insure the placement of all exiting students in either a job, a post-secondary occupational or baccalaureate program.

PROJECT SITE

These functions of career education were conducted in Calcasieu Parish which is located in the Southwestern section of Louisiana and has a population in excess of 150,000. The city of Lake Charles located in Calcasieu Parish is the center of the third largest industrial complex in Louisiana. The economy of the city is diversified and includes a variety of types of manufacturing as well as distribution and service occupations. McNeese State University is a part of the educational community of Lake Charles and will cooperate with the Calcasieu Parish Schools in conducting this project.

The Calcasieu Parish Schools are organized on a parish-wide basis and will enroll approximately 40,000 students in grades K-12. Approximately 1,800 workers are employed by the Calcasieu Parish School Board.

Schools in the Career Education Research and Development Project site numbered five. These five schools were located in the Lake Charles area. Student enrollment in the five schools numbered approximately three thousand seven hundred (3700). Data on the five schools comprise the project site are provided in Table I.

TABLE I

NUMBER OF SCHOOLS, TEACHERS, COUNSELORS, AND STUDENTS BY GRADE LEVEL ORGANIZATION IN THE PROJECT SITE SCHOOLS

Level	No. of Schools	No. of Teachers	No. of Counselors	No. of Students
Elementary	1	17	0	252
Middle School	3	84	2	1902
Senior High	1	75	2	1547
Totals	5	176	4	3701

PERSONNEL

The four component design conducted in the five schools that comprised the project site utilized the existing instructional and administrative staffs as well as a placement officer, secretary, six graduate fellows, and five Cooperation Office Education students. A project administrator and director contributed a percentage of their time as regular Calcasieu Parish staff employees.

The placement officer and secretary were employed as full time staff members for the duration of the project. The graduate fellows were employed as part-time employees contributing twenty hours per week in the course of each semester at McNeese State University. Each graduate fellow was contracted by Calcasieu Parish through McNeese State University as graduate assistants. These six graduate fellows were full-time students pursuing graduate level course work at McNeese State University. The five Cooperative Office Education students were employed four hours each day to assist the graduate fellows assigned to the project site schools. The Cooperative Office Education students were assigned in a one-to-one correspondence with the five graduate counseling fellows.

Elementary Personnel

The elementary component of this project was conducted by one graduate counseling fellow, one Cooperative Office Education student, and a percentage of the research fellow's time. The elementary component was conducted at Barbe Elementary School.

Middle School Personnel

The middle school component of this project was conducted by three graduate counseling fellows, three Cooperative Office Education students, and a percentage of the research fellow's time. Reynaud, LaGrange, and Welsh are the names of the middle schools wherein one graduate counseling fellow and one

Cooperative Office Education student were assigned to each school named.

Secondary Personnel.

Barbe High School was the site where the secondary component of this project was conducted through the efforts of the placement officer, one graduate counseling fellow, one secretary, one Cooperative Office Education student, and a percentage of the research fellow's time.

Procedures and Methods

Procedures used in conducting this project ranged in scope from providing students information about the services of the guidance and counseling fellow to on-site visitation activities. The procedures varied to some extent due to the difference in personalities of the graduate fellows, but in general the procedures were the same in each school in the project site.

In-Service

At each level the initial activity was to conduct workshops of an in-service nature to provide the teaching, counseling, and administrative staffs with a point of departure for this program. This large group workshop was continued at the local school level in the form of an in-service program.

Through in-service programs the graduate fellows attempted to structure an atmosphere wherein lesson planning that incorporated career education concepts into the existing curriculum could be perpetuated. Self-awareness, world of work information, occupational cluster concepts, and individual research in a career area were incorporated into lesson and unit plans.

On-site visitations were used as processes that insured a high interest level and a first hand knowledge of a particular series of jobs. This process was used in three components of the project.

The graduate counseling fellows used demonstration lessons to provide the instructional staff with ideas with regard to methodology, and procedures of incorporating the ideas from the world of work into the existing curriculum. These lessons were limited to a minimum time span wherein a lesson placing emphasis on a career concept was correlated with the existing curriculum.

Resource personnel were utilized to provide the students with information about community jobs as well as jobs removed from the community. Activities in terms of readiness and closure were conducted in a priori and a posteriori fashion for each resource person who visited a classroom.

A resource room was established at each school in the project site. Students were informed of the availability of the world of work information in this room, and students were either invited to visit or were scheduled to visit the resource room. The atmosphere of the resource room was informal to the point of permitting students to lounge on the carpet while viewing and/or studying career materials.

World of work resource materials provided an avenue whereby staff could gain a conspectus of the consortium that is termed career education. These materials were used for in-service activities as well as for instructional purposes. Using resource material related to the world of work provided a situation wherein the career concept could be woven into the existing curriculum. These commercially prepared materials provided the stimulus that led to the development of some teacher constructed materials used in this project.

Career awareness activities were conducted at the elementary level by establishing the following: (1) awareness of self; (2) awareness of interpersonal relationships, (3) awareness of the dignity of work; and, (4) awareness of career and occupational information concepts. For example, the series of community-helpers units normally taught at the primary level were used to establish the concept of service to individual and neighborhood. The career awareness activities, which were new to these units, placed emphasis on the concept of: (1) the community helpers working to provide money for a family; (2) needing certain skills and educational competencies; and, (3) having certain duties that relate to the functions of school attendance. As the grade level activities increased from grade one to five, the student's responsibility in terms of the knowledge of skills and competencies needed for a particular community helper's career increased.

Career exploration activities were conducted at the elementary level by establishing classroom instruction to provide background information from which the student or students could depart in exploration processes. For example, a fourth grade group of students were studying the production of goals from natural resources in a social studies unit. From the activities in the unit, the class developed an interest in industrial plant operations. This interest led to the following: (1) a resource person speaking to the group about industry; (2) development of a plant model under the direction of an industrial plant representative; (3) development of a list of construction and maintenance employees at the plant and the requirements each employee group needed to meet; (4) on-site visitation trip to Hercules Inc.; (5) a set of one hundred (100) slides about occupations at Hercules with an accompanying cassette tape; and,

(6) culuminating classroom activities. These activities were scheduled over a six-weeks reporting period. The duration of activities each day was approximately thirty (30) minutes.

Large group and individual counseling activities at the elementary level included personal, educational, and career. These sessions were conducted in classrooms and in the counselor's office.

Large group sessions conducted by the counseling fellow were used to disseminate information related to personal, educational, and career concepts. These group sessions provided students with information about career education as well as the role of the counseling fellow.

Career awareness and exploration activities were conducted in the middle schools by the graduate counseling fellows through the following: (1) scheduling classes into the resource room in fifty (5) minute periods two or three sessions per six-weeks; (2) permitting students to schedule trips to the resource room for independent research activities when academic work has been completed; (3) providing classroom instruction that correlated occupations with academic subject matter; (4) using resource people to provide first-hand information about a particular job, (its requirements, compensations, and benefits); and, (5) using on-site visitations to re-enforce or initiate exploration in a particular cluster of occupations.

An example of resource room use may combine three activities being carried out at once. A specific example follows. A class was scheduled into the resource room. The graduate counseling fellow discussed for ten minutes information about the importance of interest and career selection. The students were asked what avenue they would choose to pursue. Their options were: (1) watch and listen to a filmstrip/cassette presentation about interest and careers; (2) work independently on a particular career interest; and, (3) watch an un-narrated filmstrip about a cluster of occupations. In this case, the students were allowed to choose one of the three activities. Head-sets were utilized to prevent the narrated filmstrip/ cassette tape from disturbing the students not engaged in this activity.

Career education activities at the secondary level were conducted to enhance the following: (1) selection of an occupational area; (2) improve career decision-making; and, (3) selection of curricula to facilitate training toward a selected occupational area. An example of an activity to improve career decision-making would be either a large group counseling session or an individual session wherein the students' interest survey scores, aptitude, and educational achievement records are aligned in order to establish a profile that correlates with a particular career cluster.

Ability to select an occupational area was improved through large group and individual counseling activities as well as through instructional processes. Students were presented information regarding the many occupational areas available locally and regional. Students were asked to focus the following for each job: (1) an educational level required as compared to aspirations; (2) educational level required compared to their prior school achievement; (3) conditions of employment as related to their interest; and, (4) compensation, benefits, and promotional aspects of the position as these data relate to their aspirations.

Many techniques were used to increase initial occupational area selection success in the large group counseling sessions as well as the instructional program. Filmstrips, resource personnel, cassette taped information, and printed materials were used to supplement the counseling fellow's and teacher's presentations.

A resource room containing job facts was open to the secondary students four (4) hours each day. Students were permitted to visit this room and conduct independent research activities about themselves, curriculum needed for a job, or information about a particular career area. When the counseling fellow was in the resource room, he assisted students upon request. If the counseling fellow was not in the resource room, then a Cooperative Office Education student assisted students in locating information.

Placement service activities conducted in this project were structured in order to place exiting students in a job, training program, or baccalaureate program. The following functions were completed: (1) canvass the greater Lake Charles area to determine the availability of jobs; (2) conducted meetings with students to explain the role of the placement component and the processes involved in receiving help from the placement service; (3) developed skills in making application for a position through the English classes; and, (4) provided placement services for the Cooperative Office Education programs.

Agencies in the Lake Charles area that function as employment placement services were contacted to inform them of the role of the placement component. Forms and other data that would facilitate skill development on part of the students were supplied by these agencies.

The placement component developed in the students a knowledge of the role and function of placement services by working through the English classes at the secondary school. Also, English classes were used to familiarize students with forms used in making application for a position.

Information about available jobs, part-time and full-time, were recorded for a reference in terms of placing an exiting student. Correlating a student's interest, aptitude, and ability with a particular position was a function of the guidance counseling fellow and the placement officer.

BODY OF THE REPORT

RESEARCH AND DEVELOPMENT IN CAREER EDUCATION

PROJECT #V261029L

SECTION 6d

RESULTS AND ACCOMPLISHMENTS

GENERAL RESULTS AND ACCOMPLISHMENTS OF THE RESEARCH AND DEVELOPMENT PROJECT IN CAREER EDUCATION IN CALCASIEU PARISH

Calcasieu Parish Input

Without question, the single accomplishment by which this project will contribute most to the education of youth in Calcasieu Parish was the establishment of a core group of people with an extensive knowledge of career education. Through the Research and Development Project in Career Education, seven Calcasieu Parish employees were afforded an opportunity to develop a degree of expertise in the fundamentals of career education. These people have already proven to be valuable to education in Calcasieu Parish, in the Southwest Louisiana Region, and in the State of Louisiana.

Parish Input Beyond Calcasieu

Team members from the Research and Development Project in Career Education have been called on to conduct lectures, and give demonstration lessons, and informal discussions for Parish School Systems other than Calcasieu. To cite two examples, Cameron and Natchitoches Parishes have utilized team members at the Central Office Administration as well as the instructional staff level to disseminate career education information.

Input at State Department Level

Team members from the Calcasieu Project in Career Education have been used as consultants to curriculum writing teams, lecture and demonstration presenters, and discussion group leaders by the Louisiana State Department of Education. These members have been used to disseminate information at statewide counselor conferences as well as joint meetings of the executive membership of the Louisiana Teachers' Association, Louisiana Educators' Association, and State Department of Education.

Input at University Level

The Research and Development Project in Career Education conducted by Calcasieu Parish involved six graduate students attending McNeese State University. These students conducted the project activities while being full-time graduate students. Through class discussion, lectures, and demonstrations, the team members provided input for career education at the university level. These procedures reached other graduate students as well as university professors. Informal meetings by the team members with the various Deans and Department Heads provided sessions of information dissemination due to many questions asked by university personnel. Several formal speaking sessions were conducted by team members in graduate level classes wherein the team members were not enrolled. These requests were presented to the team members by either the Dean or other professors.

Career education information at the university level was disseminated in the classes conducted by the following professors: Dr. Toffee Nassar; Dr. W. C. Hughes; Dr. Stanley LeJeune; Dr. T. E. Jordan; Dr. R. H. Pittman; Dr. S. T. Pendarvis; Miss Ella Roberts; Dr. T. O. Brand; Dr. Richard Harrison; and, Dr. E. F. McLaughlin. These sessions were conducted in a formal setting. Other information dissemination sessions were conducted in the aforementioned professors' classes as well as others.

Aids for Curriculum Development

Team members of this project worked with teachers employed at the project site schools in varying capacities. One purpose of the graduate counseling fellows dealt with the development of aids wherein the classroom teacher could be provided methods, ideas, and procedures for incorporating career education into the existing curriculum. These aids are divided into three levels which reflect the organizational pattern of Calcasieu Parish. These aids are few in number, however, when consideration is given to the time burden on the counseling fellows the production of these aids must be termed excellent. The quality of these aids as they relate to the concept of career education is considered excellent, also. These aids are presented in Appendix A.

Counselor In-Service

Counselor in-service provided a situation wherein career education information, methods, and goals could be perpetuated. These sessions proved valuable in terms of expanding the career and vocational guidance concepts. An increse in vocational counseling activities is expected for the 1973-74 session as a result of the in-service training for counselors.

Media Information Dissemination

Various news coverage was provided for this project. The coverage included media in the form of television and newspaper. The television coverage included two thirty-minute showings that provided viewers with an overview of the career education program. The newspaper clippings appear in Appendix B.

Objectives - Three Levels

The following narrative denotes the behavioral objectives and the project results in each objective area.

1. The graduate fellows will conduct forty independent research sessions, four hours each, to obtain a repertory of career education of information during the course of the Summer Semester 1972.

   The six graduate fellows conducted the forty research sessions. A portion of the forty sessions were conducted in group situations since there was a need for input from each fellow regarding such items as philosophy and methods.

2. Each graduate counseling fellow will establish a counseling office and career education resource room at the project site school wherein he is assigned prior to the opening of the 1972-73 school session.

   This objective was fulfilled. Each counseling fellow was assigned an office and resource room to use in conducting their activities. The resource room proved essential at the elementary and middle school levels.

3. The graduate fellows will conduct eight (encompassing one hour) in-service meetings at each of the project site schools in the course of the first semester of the 1972-73 academic year.

   The quarterly reports of this project will indicate that this objective was obtained and surpassed. The nature of the career education concept necessitated conducting many in-service sessions beyond the number denoted in this objective.

4. The graduate counseling fellows will conduct individual meetings with each teacher once per six-weeks' reporting period for the purpose of career education resource and implementation.

   This objective was met at the elementary level. At the middle school level, the difficulty involved in scheduling and the number of teachers at each middle school prohibited consulting with each teacher. At the secondary level each teacher met with the counseling fellow at least twice during the session. Some secondary teachers met with the counseling fellow on numerous occassions.

5. Each graduate fellow will serve as a consultant to the teaching staff in terms of implementing career education concepts into the existing curriculum.

   This objective was met each day of the school year. The quarterly reports will indicate the various activities that resulted from these meetings.

6. Each graduate counseling fellow will structure a schedule wherein he will be available one (1) hour per day each week for the purpose of individual counseling.

   Each counselor established a period each day for individual counseling. Some days were not used for this activity while on other occassions the entire day was expended in this activity.

7. A Vocational Guidance Workshop will be scheduled over fifteen months, six hours per month, for the purpose of in-service training related to familiarization with career development theory and an exploration of the world of work.

   This activity was conducted in the Conference Room of the Supplementary Resource Center. This objective was met with regard to the number of monthly sessions and the objective was surpassed relative to the time involved.

8. Design a model in the academic year 1972-73 to predict what percentage of the middle school population would select a technical and industrial training program upon reaching the secondary level of education.

   An attempt was made to structure a model to predict what percentage of the middle school population would select a T & I program upon reaching the secondary school. For the statistically procedure of this activity see the factor analysis section under the heading of Middle School and Secondary School Statistical Accomplishments. A model was not structured due to the homogenous nature of the factors determined from the collected data.

Objectives - Elementary

9. The elementary graduate counseling fellow will conduct twenty career guidance group sessions (two (2) per class for grades 1-5) in the first semester of the 1972-73 school year for the purpose of information

dissemination to students about the role of the career education guidance counselor.

As indicated in the quarterly reports, this objective was surpassed. Numerous sessions were conducted in the first and second semesters of the 1972-73 session. These sessions included information dissemination by audio, visual, audio-visual, and demonstration activities. Pamphlets and books were used in these activities, also.

10. The elementary graduate fellow will act as a consultant as each elementary teacher teaches five lessons in each of the following areas. The areas will be:

    A. Lessons focusing on the interest and abilities of the children as an element of the importance of each individual.

    B. Lessons with a theme concerning the relationship of the child to his family group.

    C. Lessons with emphases on the relationship of a child to his neighbors and neighborhood.

    D. Lessons related to the dignity and value of work.

    E. Lessons related to the careers of people in the local community.

    F. Lessons emphasizing the world of work and occupational information.

    G. Lessons which expose students to the fifteen occupational clusters.

    This objective was met for each category listed. Information regarding these categories are presented in the Aids for Curriculum Development, Appendix A. The completion of the efforts related to this objective was not secured until the last reporting period of the session. The reason for the late completion was attributed to the problem of acquainting teachers with the career education concept in a form where the teachers would break a tradition and incorporate career education concepts.

11. A pre and post questionnaire survey related to the world of work will be administered by the graduate counseling and research fellows and marked by the students in the first and second semesters of the 1972-73 academic year.

This objective was met and the information delineating the survey is presented in the section entitled Elementary Statistical Results and Accomplishments.

Objectives - Middle School

12. The middle school counseling fellows will serve each class of students as they visit the career education resource room twice each six-weeks' period for a sixty minute period for the purpose of information dissemination about occupations in the fifteen clusters and the world of work.

    This objective was met in one of the three middle schools. The scheduling problems prohibited the total success in this area. However, many students visited the resource room more than twice per reporting period. Each class of students in the three middle schools did visit the resource rooms at least once during each reporting period.

13. The middle graduate counseling and research fellows will collect data on the students enrolled in the project site middle schools pertaining to achievement, intelligence, and interest area.

    This objective as met. Completed data that was statistically analyzed appears in the t-ratio and factor analysis sections of the portion of this report that is entitled Middle School and Secondary School Statistical Results.

14. The middle school graduate counseling fellows will develop a model for guidance and counseling at the middle school level.

    A career education guidance model was structured by participants in this project. Components of the model include the following: (1) group counseling (2) individual counseling; (3) testing; (4) information dissemination; and, (5) resource personnel.

Objectives - Secondary

15. The secondary graduate counseling fellow will schedule each class of students into the testing room for at least one sixty minute visit to disseminate information about the world of work.

    This objective was not met in terms of each section, but the objective was met in terms of each student being a member of a group that did attend a meeting scheduled for information dissemination purposes.

This objective was achieved by scheduling every English class in the counselor's testing room in order to discuss career education guidance.

16. The secondary graduate counseling fellow will schedule visits to classes in each department area for the purpose of disseminating information about the relationship of 'said' department to the world of work.

    This objective criterion was achieved. Results of these meetings are evident in the secondary section of Appendix A.

17. The secondary graduate counseling fellow will conduct five group meetings with each subject area faculty team for the purpose of establishing a career education curriculum design.

    This objective was achieved. Lesson and unit plans that reflect infusion of career ideas that resulted from this objective are presented in the secondary section of Appendix A.

18. The secondary graduate counseling and research fellows will collect data on the students enrolled in the project site school pertaining to: (1) achievement levels; (2) intelligence; (3) interest areas; and, (4) first, second, and third career choices.

    This objective was achieved. The results appear in the t-ratio and factor analysis section of the section entitled Middle School and Secondary School Statistical Results. Part four (4) of this objective is presented in Appendix C of this report.

ELEMENTARY INSTRUCTIONAL
RESULTS AND ACCOMPLISHMENTS

The elementary school program stressed the awareness phase of career education. Units and lessons were developed related to career awareness, how to get along with others, and the dignity and value of work. Exploration of the career clusters was a part of the career program. The exploration phase was geared more toward students enrolled in grades four and five.

The exploration and awareness phases of the career education program were included in the counseling component. Group and individual counseling sessions were conducted at the elementary school in the project site.

The counseling fellow was used as a resource person to teachers, principal, and para-professionals. As a resource person the counseling fellow conducted in-service sessions, demonstrated materials, and assisted in the preparation of lesson plans to incorporate career education into the existing curriculum.

Ten on-site-visitations were conducted by the counseling fellow. These trips involved single and multi-class tours of job sites wherein occupational information was disseminated.

The counseling fellow assisted instructional personnel by obtaining resource people to supply career awareness and occupational information for the students. A variety of resource people were used throughout the year.

Counseling. Individual counseling was undertaken in an office set up in part of an empty classroom. Work and play areas were established with bookcases and file cabinets. All of the material used was work oriented . Play therapy, dramatizations, puppetry and stories were used to enhance career education.

During the breakfast hour the counseling fellow visited with the students. A good beginning is an important aspect of self awareness for an elementary child. Tickets with smiling faces were given for eating all the breakfast meal. Five tickets could be cashed in for a metal smiling face in the counselor's office. This button was worn until the following Monday. On Monday's these buttons could be exchanged for ice cream to be eaten with the noon meal.

Yellow smiling face tickets were given only in the principal's office. These were used to see that children lost their fear of the principal and his office. These yellow tickets were given by a faculty or staff member and these tickets could be used as breakfast tickets or for ice cream.

Happy Grams were printed to resemble a small telegram with a smiling face. The message was, "I had a Happy Day Today." There was a space for a personal message (or picture) and the teacher's signature as well as the student's signature. These'Happy Grams' were sent to other teachers, parents, and friends.

Two full length mirrors were purchased and placed where student traffic was heaviest upon entering the building. These mirrors were installed flush with the wall. Above the mirrors the words "We Love You" were written. No explanation for the mirrors was needed because the students seemed to take a second look and smile, brush down rumpled hair or stick a shirt-tail in.

During recess and after school the students were encouraged to come to the counseling room and discuss problems and interesting subjects.

A staff member from the psychology department of McNeese State University was invited to demonstrate group counseling for teachers. Teachers were encouraged to follow up this session.

The counseling fellow worked with the fifteen teachers and three aides planning career education counseling activities.

When invited to do so, the counseling fellow joined with teachers and/or the principal in conferences with parents. She accompanied ill children home, checked on repeatedly tardy cases, and excess absences on particular cases.

Teachers were encouraged to use the guidance materials available to them. The counseling fellow was often invited into the classroom for stories or films on values, self awareness, and work awareness.

Short interest questionnaires were answered by third and fourth grade students. Fifth grade students filled in a more detailed questionnaire. These were placed in the cumulative folder.

The counseling fellow assisted and administered tests when invited to do so.

These many functions help to promote self awareness, awareness of others, and provided information to assist developing a well-rounded individual who would be capable of making a choice as well as adjustments in the world of work.

RESOURCE PEOPLE USED IN ELEMENTARY PROGRAM

Mr. Ernie LeLeaux - Shrimp boat owner
Mr. William Reichard - Shrimp boat operator (Big Lake)
Mr. Andrew LaVergne - Ferry operator - Big Lake Community
Mr. B. J. Greeson - Principal - Barbe Elementary
Mrs. Jean Richard - School Nurse - Calcasieu Parish Schools
Dr. Adolph J. Murrey - Dentist - Lake Charles
Captain Donald Schopen - Lake Charles Police Department
Mr. John Smith - McNeese State University Farm
Dr. Richard Harrison - Psychology Instructor - McNeese State University
Mayor James Sudduth - Mayor - City of Lake Charles
Mr. Rufus Mayfield - Councilman - City of Lake Charles
Mr. James L. Hoffpauir - City Hall - Lake Charles
Mr. Jake W. Posey - American Bank of Commerce - Lake Charles
Mr. Stuart Keesee - Personnel Director - Hercules, Inc.
Mr. Jessie Neil - Plant worker - Hercules, Inc.
Mrs. W. R. Talley - School bus driver
Mrs. Corinne Peace - Reporter - The American Press
Mr. A. L. DeRouen - Placement Officer - Calcasieu Parish Schools
Mr. Sparky Myers - Contractor - Lake Charles
Mr. Pete Drozda - Sales Representative for Sparky Myers Construction Co.
Mrs. Proveolai - Parent from Switzerland
Miss J. Ketzel - Dubac Arabia
Mr. M. L. Clooney - Parent employed by Orkin
Mrs. Barbara Floyd - School secretary
Mrs. Lucille Duhon - Cafeteria Manager
Mr. Euzebe Thibodeaux - School Janitor

Elementary Administrator's Comments. I feel that career education has made significant changes in the educational program of Barbe Elementary School. Changes are evident in both the students and faculty.

In the beginning our faculty reflected what I believe is a typical feeling of most elementary teachers. That is, "that we have been teaching career education all along." After a few weeks of study and involvement in a planned career education program we realized that when we made the above statement that we had only been fooling ourselves. We now know that the old units we had taught on community helpers, etc. were only a very small part of a well planned career education program.

We saw early in our program that our students and in some cases teachers had a very poor understanding of our community in terms of a world of work. Also it was evident that the individual's own worth and contribution in a working society was very distorted. We had a number of students from welfare type backgrounds that saw very little value in work and on the other side of the scale we had many students that saw career success only in terms of professional careers.

After involvement in the career education program I find that the students have a better understanding of their part in a working society and a much better evaluation of themselves. Also the faculty has a much broader outlook on career education and its importance in the educational process. I also feel that this has helped teachers see more worth of the individual.

Some of the other outstanding things that I feel we have gained from this career education program are: (1) We see a very great need for counseling in the early years of a student's life; (2) We see a great need for self awareness to be taught students in the lower grades; (3) We see a need for students to be made aware of the many and varied careers [while he is in elementary school] before choices have to be made in selection of careers; (4) We see that attitudes toward the importance of work must be developed in a student while he is young; (5) We have found that the career education program has provided us with means of involving our community in education and improved public relations; (6) We have found that it has stimulated student interest and decreased discipline problems (7) We have found that career education can be correlated with most any subject; (8) We have found that many of the methods, techniques, and student understanding developed in career education has helped teaching to improve in general; and, (9) We feel that it has made a significant improvement in our students' attitudes toward school and education.

As a principal I feel that two factors are very important if a career education program is to be a success: (1) A good career guidance counselor is most important; and, (2) A great deal of in-service training must be done with a faculty before career education begins in the classroom.

ELEMENTARY STATISTICAL RESULTS AND ACCOMPLISHMENTS

Elementary Survey

At the elementary school in the Calcasieu Parish Research and Development Project for Career Education, statistical treatment of a pre and post questionnaire provided a conspectus of project input. The questionnaire was a twenty (20) question survey consisting of items about the world of work. Statistical treatment involved a chi-square treatment using a normalized distribution and pre-survey scores as the expected frequencies.

Elementary students enrolled in grades one through five were asked to respond to each item on the questionnaire in a dichotomous fashion. The time burden on part of the students varied with the age level of the students participating. A total of two hundred forty-eight (248) students marked the questionnaire.

Grade one students numbered fifty-five (55). One the pre-questionnaire survey, the largest number of students answering yes was thirty-eight (38). The question, number four (4) on the survey, was "When you get a job do you think you will be a good worker?" The smallest number of yes answers was obtained on question eighteen (18) which asked, "Should people ever do a job they don't like?" Eight students in grade one answered yes. These data are presented in Table II.

On the post-questionnaire survey, grade one students responded yes forty-six (46) times on question four (4) which asked, "When you get a job do you think you will be a good worker?" The smallest number of yes answers was obtained on question eighteen (18) which asked, "Should people ever do a job they don't like?" Twelve (12) students in grade one answered yes to question eighteen (18). Presented in Table III are these post-questionnaire data for grade one.

Presented in Table IV are the data representing the results of the pre-post questionnaire survey for grade one including the differences which occured between the answers. A negative numeral in the difference column of Table IV represents an increase in the number of responses for a particular question on the post-questionnaire. The greatest change in yes responses occured on the question "Should people get money who don't work?" An increase of twenty-one (21) yes answers were experienced for this question. The results on this item appear to indicate that the project efforts were null. However, when the units of instruction were analyzed it was found that emphases had been placed on the dignity of the aged and handicapped which appeared to have made an impression on grade one students.

TABLE II

THIS IS A QUESTIONNAIRE ABOUT THE WORLD OF WORK FOR GRADE 1 . THERE ARE NO RIGHT OR WRONG ANSWERS

PRE-TEST	YES	NO	DA
1. When you finish school do you want to work?	34	13	8
2. Do you think all jobs are important?	33	14	8
3. Do you think people who work are happy?	30	12	13
4. When you get a job do you think you will be a good worker?	38	7	10
5. Do you think people should work hard?	35	9	11
6. Should all grown-ups work?	29	18	8
7. Would you like to have a summer job when you are old enough?	36	9	10
8. Would you like to do an important job?	33	10	12
9. Should people who have families have to work?	32	12	11
10. Should people get money who don't work?	10	30	15
11. Do you think anybody really wants to work?	33	12	10
12. Will you just work hard enough to get by?	37	7	11
13. Do you think you should work to get money?	37	9	9
14. Do you think people who work help other people?	30	16	9
15. Do you like adults who don't work?	18	27	10
16. Do you like adults who work?	37	10	8
17. Do you think people work just for money?	28	17	10
18. Should people ever do a job they don't like?	8	36	11
19. Do you think people who work are unhappy?	27	18	10
20. Do you think people who work make lots of friends?	35	5	15

TABLE III

THIS IS A QUESTIONNAIRE ABOUT THE WORLD OF WORK FOR GRADE 1 . THERE ARE NO RIGHT OR WRONG ANSWERS

POST-TEST		YES	NO	DA
1.	When you finish school do you want to work?	28	18	9
2.	Do you think all jobs are important?	43	2	10
3.	Do you think people who work are happy?	41	6	8
4.	When you get a job do you think you will be a good worker?	46	1	8
5.	Do you think people should work hard?	44	2	9
6.	Should all grown-ups work?	34	14	7
7.	Would you like to have a summer job when you are old enough?	37	11	7
8.	Would you like to do an important job?	40	7	8
9.	Should people who have families have to work?	32	15	8
10.	Should people get money who don't work?	31	20	4
11.	Do you think anybody really wants to work?	33	13	9
12.	Will you just work hard enough to get by?	40	6	9
13.	Do you think you should work to get money?	42	5	8
14.	Do you think people who work help other people?	37	9	9
15.	Do you like adults who don't work?	25	20	10
16.	Do you like adults who work?	40	5	10
17.	Do you think people work just for money?	21	23	11
18.	Should people ever do a job they don't like?	12	32	11
19.	Do you think people who work are unhappy?	17	20	18
20.	Do you think people who work make lots of friends?	43	5	7

TABLE IV

SUMMARY SHEET FOR A QUESTIONNAIRE ABOUT THE WORLD OF WORK FOR GRADE 1 .

Question Number	Pre-test Answers			Post-test Answers			Difference in (Pre) - (Post) =		
	YES	NO	DA	YES	NO	DA	YES	NO	DA
1	34	13	8	28	18	9	6	-5	-1
2	33	14	8	43	2	10	-10	12	-2
3	30	12	13	41	6	8	-11	6	5
4	38	7	10	46	1	8	-8	6	2
5	35	9	11	44	2	9	-9	7	2
6	29	18	8	34	14	7	-5	4	1
7	36	9	10	37	11	7	-1	-2	3
8	33	10	12	40	7	8	-7	5	4
9	32	12	11	32	15	8	0	-3	3
10	10	30	15	31	20	4	-21	10	11
11	33	12	10	33	13	9	0	-1	1
12	37	7	11	40	6	9	-3	1	2
13	37	9	9	42	5	8	-5	4	1
14	30	16	9	37	9	9	-7	7	0
15	18	27	10	25	20	10	-7	7	0
16	37	10	8	40	5	10	-3	5	-2
17	28	17	10	21	23	11	7	-6	-1
18	8	36	11	12	32	11	-4	4	0
19	27	18	10	17	20	18	10	-2	-8
20	35	5	15	43	5	7	-8	0	8

Grade two students numbered forty-five (45). One the pre-questionnaire survey, forty (40) students answered yes to the question. "Do you think you should work to get money?" The smallest number of yes answers were recorded on the question, "Should people ever do a job they don't like?" Nine (9) students marked yes for this question. These data are presented in Table V.

On the post-questionnaire survey, grade two students recorded yes forty (40) times for the questions, "Do you think people who work help other people?" and "Do you think people who work make lots of friends?" The smallest number of yes answers occured on the question, "Should people ever do a job they don't like?" Seven (7) students marked yes on this question. These data are presented in Table VI.

Presented in Table VII are the differences in the pre-post questionnaire survey responses for grades two. The largest change in yes answers occured on question twelve (12) which asked, "Will you just work hard enough to get by?" Twenty-nine (29) students said yes on the pre-questionnaire and sixteen (16) responded yes on the post-questionnaire. This questionnaire item appears to indicate that the project input was accomplishing the desired outcomes at the grade two level.

Grade three students numbered forty-three (43). On the pre-questionnaire survey, forty-two students answered yes to the question, "Do you like adults who work?" The forty-two (42) yes answers on the aforementioned question represents the largest number of yes responses. The smallest number of yes responses was recorded on two questions. Nine students marked yes on the questions, "Do you think people work just for money?" and "Should people ever do a job they don't like?" These data are presented in Table VIII.

On the post-questionnaire survey, grade three students answered yes the largest number of times, thirty-nine (39), on the questions "Do you think people who work are happy?" and "Do you think people who work help other people?" The smallest number of yes answers for grade three students was recorded on the question, "Should people get money who don't work?" Nine (9) students marked yes on this question. Reported in Table IX are the post-questionnaire data for grade three.

Grade three responses in terms of differences between pre-post questionnaire survey results are presented in Table X. The largest change in yes answers occurred on question eighteen (18) which asked, "Should people ever do a job they don't like?" Nine (9) grade three students answered yes to question eighteen (18) on the pre-questionnaire and thirty-eight (38) grade three students answered yes to question eighteen (18) on the post-questionnaire. A net change of twenty-nine (29) responses was the differences between the pre-post questionnaire. This difference is attributed

TABLE V

THIS IS A QUESTIONNAIRE ABOUT THE WORLD OF WORK FOR GRADE 2. THERE ARE NO RIGHT OR WRONG ANSWERS

PRE-TEST		YES	NO	DA
1.	When you finish school do you want to work?	28	17	0
2.	Do you think all jobs are important?	32	13	0
3.	Do you think people who work are happy?	31	14	0
4.	When you get a job do you think you will be a good worker?	39	6	0
5.	Do you think people should work hard?	38	7	0
6.	Should all grown-ups work?	29	16	0
7.	Would you like to have a summer job when you are old enough?	30	15	0
8.	Would you like to do an important job?	35	10	0
9.	Should people who have families have to work?	25	20	0
10.	Should people get money who don't work?	11	34	0
11.	Do you think anybody really wants to work?	31	14	0
12.	Will you just work hard enough to get by?	29	16	0
13.	Do you think you should work to get money?	40	5	0
14.	Do you think people who work help other people?	36	9	0
15.	Do you like adults who don't work?	29	16	0
16.	Do you like adults who work?	29	16	0
17.	Do you think people work just for money?	16	29	0
18.	Should people ever do a job they don't like?	9	36	0
19.	Do you think people who work are unhappy?	19	26	0
20.	Do you think people who work make lots of friends?	39	4	2

TABLE VI

THIS IS A QUESTIONNAIRE ABOUT THE WORLD OF WORK FOR GRADE 2. THERE ARE NO RIGHT OR WRONG ANSWERS

POST-TEST	YES	NO	DA
1. When you finish school do you want to work?	35	5	5
2. Do you think all jobs are important?	31	9	5
3. Do you think people who work are happy?	35	5	5
4. When you get a job do you think you will be a good worker?	36	4	5
5. Do you think people should work hard?	34	6	5
6. Should all grown-ups work?	22	18	5
7. Would you like to have a summer job when you are old enough?	31	9	5
8. Would you like to do an important job?	35	5	5
9. Should people who have families _have_ to work?	23	16	6
10. Should people get money who don't work?	17	23	5
11. Do you think anybody really wants to work?	21	19	5
12. Will you just work hard enough to get by?	16	24	5
13. Do you think you should work to get money?	32	8	5
14. Do you think people who work help other people?	40	0	5
15. Do you like adults who don't work?	23	16	6
16. Do you _like_ adults who work?	36	4	5
17. Do you think people work _just_ for money?	23	16	6
18. Should people ever do a job they don't like?	7	34	4
19. Do you think people who work are unhappy?	17	22	6
20. Do you think people who work make lots of friends?	40	0	5

TABLE VII

SUMMARY SHEET FOR A QUESTIONNAIRE
ABOUT THE WORLD OF WORK
FOR GRADE 2 .

Question Number	Pre-test Answers			Post-test Answers			Difference in (Pre) - (Post) =		
	YES	NO	DA	YES	NO	DA	YES	NO	DA
1	28	17	0	35	5	5	-7	12	-5
2	32	13	0	31	9	5	1	4	-5
3	31	14	0	35	5	5	-4	9	-5
4	39	6	0	36	4	5	3	2	-5
5	38	7	0	34	6	5	4	1	-5
6	29	16	0	22	18	5	7	-2	-5
7	30	15	0	31	9	5	-1	6	-5
8	35	10	0	35	5	5	0	5	-5
9	25	20	0	23	16	6	2	4	-6
10	11	34	0	17	23	5	-6	11	-5
11	31	14	0	21	19	5	10	-5	-5
12	29	16	0	16	24	5	13	-8	-5
13	40	5	0	32	8	5	8	-3	-5
14	36	9	0	40	0	5	-4	9	-5
15	29	16	0	23	16	6	6	0	-6
16	29	16	0	36	4	5	-7	12	-5
17	16	29	0	23	16	6	-7	13	-6
18	9	36	0	7	34	4	2	2	-4
19	19	26	0	17	22	6	2	4	-6
20	39	4	2	40	0	5	-1	4	-3

TABLE VIII

THIS IS A QUESTIONNAIRE ABOUT THE WORLD OF WORK FOR
GRADE 3 . THERE ARE NO RIGHT OR WRONG ANSWERS

PRE-TEST		YES	NO	DA
1.	When you finish school do you want to work?	26	15	2
2.	Do you think all jobs are important?	19	23	1
3.	Do you think people who work are happy?	32	10	1
4.	When you get a job do you think you will be a good worker?	40	2	1
5.	Do you think people should work hard?	37	5	1
6.	Should all grown-ups work?	26	16	1
7.	Would you like to have a summer job when you are old enough?	30	12	1
8.	Would you like to do an important job?	39	3	1
9.	Should people who have families have to work?	34	8	1
10.	Should people get money who don't work?	26	16	1
11.	Do you think anybody really wants to work?	34	8	1
12.	Will you just work hard enough to get by?	33	9	1
13.	Do you think you should work to get money?	40	2	1
14.	Do you think people who work help other people?	38	3	2
15.	Do you like adults who don't work?	20	22	1
16.	Do you like adults who work?	42	0	1
17.	Do you think people work just for money?	9	33	1
18.	Should people ever do a job they don't like?	9	33	1
19.	Do you think people who work are unhappy?	23	19	1
20.	Do you think people who work make lots of friends?	41	1	1

TABLE IX

THIS IS A QUESTIONNAIRE ABOUT THE WORLD OF WORK FOR GRADE 3. THERE ARE NO RIGHT OR WRONG ANSWERS

POST-TEST	YES	NO	DA
1. When you finish school do you want to work?	36	4	3
2. Do you think all jobs are important?	32	8	3
3. Do you think people who work are happy?	39	1	3
4. When you get a job do you think you will be a good worker?	36	4	3
5. Do you think people should work hard?	33	7	3
6. Should all grown-ups work?	25	15	3
7. Would you like to have a summer job when you are old enough?	24	16	3
8. Would you like to do an important job?	36	4	3
9. Should people who have families have to work?	33	7	3
10. Should people get money who don't work?	9	33	1
11. Do you think anybody really wants to work?	30	10	3
12. Will you just work hard enough to get by?	24	16	3
13. Do you think you should work to get money?	37	3	3
14. Do you think people who work help other people?	39	2	2
15. Do you like adults who don't work?	17	23	3
16. Do you like adults who work?	37	3	3
17. Do you think people work just for money?	36	4	3
18. Should people ever do a job they don't like?	38	2	3
19. Do you think people who work are unhappy?	33	7	3
20. Do you think people who work make lots of friends?	38	2	3

TABLE X

SUMMARY SHEET FOR A QUESTIONNAIRE ABOUT THE WORLD OF WORK FOR GRADE 3 .

Question Number	Pre-test Answers			Post-test Answers			Difference in (Pre) - (Post) =		
	YES	NO	DA	YES	NO	DA	YES	NO	DA
1	26	15	2	36	4	3	-10	11	-1
2	19	23	1	32	8	3	-13	15	-2
3	32	10	1	39	1	3	-7	9	-2
4	40	2	1	36	4	3	4	-2	-2
5	37	5	1	33	7	3	4	-2	-2
6	26	16	1	25	15	3	1	1	-2
7	30	12	1	24	16	3	6	-4	-2
8	39	3	1	36	4	3	3	-1	-2
9	34	8	1	33	7	3	1	1	-2
10	26	16	1	9	33	1	17	-17	0
11	34	8	1	30	10	3	4	-2	-2
12	33	9	1	24	16	3	9	-7	-2
13	40	2	1	37	3	3	3	-1	-2
14	38	3	2	39	2	2	-1	1	0
15	20	22	1	17	23	3	3	-1	-2
16	42	0	1	37	3	3	5	-3	-2
17	9	33	1	36	4	3	-27	29	-2
18	9	33	1	38	2	3	-29	31	-2
19	23	19	1	33	7	3	-10	12	-2
20	41	1	1	38	2	3	3	-1	-2

to the efforts expended by the Career Education Research and Development Project staff and materials.

Grade four had an enrollment of fifty-two (52) students at the elementary school in the project site. On the pre-questionnaire survey, the entire fourth grade enrollment answered yes to question twenty (20) which asked, "Do you think people who work make lots of friends?" Also, fifty (50) students marked yes on question thirteen (13) which asked, "Do you think you should work to get money?" The smallest number of yes answers was recorded on question seventeen (17) which asked, "Do you think people work just for money?" Table XI contains the pre-questionnaire survey results for grade four.

On the post-questionnaire survey, grade four students answered yes forty-five (45) times on the questions numbered one (1), sixteen (16) and twenty (20). These questions were: (1) question one (1) asked, "When you finish school do you want to work?"; (2) question sixteen (16) asked, "Do you like adults who work?"; and, (3) "Do you think people who work make lots of friends?" Three (3) grade four students answered yes to the question "Should people ever do a job they don't like?" The post-questionnaire data for grade four are recorded in Table XII.

There appeared to be a considerable amount of change in fourth grade students as may be indicated by the responses on seven questions from the pre-post questionnaire survey. In Table XIII, the difference column contains large numerical values in the yes sub-column for questions 6, 10, 12, 13, 18, and 19. The greatest amount of change occurred on question 18 which asked, "Should people ever do a job they don't like?" On question 19, fourth grade students answered yes thirty-one (31) times on the pre-questionnaire and five (5) times on the post-questionnaire. Question 19 asked, "Do you think people who work are unhappy?" The change of twenty-six (26) answers on question 19 appears to represent the direction toward which the Career Education Project was directed.

Enrolled in grade five of the elementary school located in the project site were fifty-three (53) students. On the pre-questionnaire survey, forty-five (45) students in the fifth grade marked yes to the question "Would you like to do an important job?" Also, forty-four (44) students answered yes to the question "When you finish school do you want to work?" The smallest number of yes responses, three (3), was recorded for the question which asked, "Should people ever do a job they don't like?" These data for the pre-questionnaire survey at grade five are presented in Table XIV.

Post-questionnaire survey data for grade five are recorded in Table XV. Fifth grade students marked yes forty-seven (47) times for question 1 which asked, "When you finish school do you

TABLE XI

THIS IS A QUESTIONNAIRE ABOUT THE WORLD OF WORK FOR GRADE 4 . THERE ARE NO RIGHT OR WRONG ANSWERS

PRE-TEST		YES	NO	DA
1.	When you finish school do you want to work?	44	8	0
2.	Do you think all jobs are important?	42	10	0
3.	Do you think people who work are happy?	47	5	0
4.	When you get a job do you think you will be a good worker?	43	9	0
5.	Do you think people should work hard?	35	17	0
6.	Should all grown-ups work?	37	15	0
7.	Would you like to have a summer job when you are old enough?	46	6	0
8.	Would you like to do an important job?	46	6	0
9.	Should people who have families have to work?	37	15	0
10.	Should people get money who don't work?	36	16	0
11.	Do you think anybody really wants to work?	27	25	0
12.	Will you just work hard enough to get by?	39	13	0
13.	Do you think you should work to get money?	50	2	0
14.	Do you think people who work help other people?	48	4	0
15.	Do you like adults who don't work?	37	15	0
16.	Do you like adults who work?	50	2	0
17.	Do you think people work just for money?	15	37	0
18.	Should people ever do a job they don't like?	32	20	0
19.	Do you think people who work are unhappy?	31	21	0
20.	Do you think people who work make lots of friends?	52	0	0

TABLE XII

THIS IS A QUESTIONNAIRE ABOUT THE WORLD OF WORK FOR
GRADE 4 . THERE ARE NO RIGHT OR WRONG ANSWERS

POST-TEST *		YES	NO	DA
1.	When you finish school do you want to work?	45	0	7
2.	Do you think all jobs are important?	34	11	7
3.	Do you think people who work are happy?	41	4	0
4.	When you get a job do you think you will be a good worker?	39	6	7
5.	Do you think people should work hard?	28	17	7
6.	Should all grown-ups work?	18	26	8
7.	Would you like to have a summer job when you are old enough?	38	7	7
8.	Would you like to do an important job?	43	2	7
9.	Should people who have families have to work?	30	15	7
10.	Should people get money who don't work?	13	32	7
11.	Do you think anybody really wants to work?	24	21	7
12.	Will you just work hard enough to get by?	24	21	7
13.	Do you think you should work to get money?	37	8	7
14.	Do you think people who work help other people?	41	4	7
15.	Do you like adults who don't work?	30	15	7
16.	Do you like adults who work?	45	0	7
17.	Do you think people work just for money?	8	37	7
18.	Should people ever do a job they don't like?	3	42	7
19.	Do you think people who work are unhappy?	5	42	5
20.	Do you think people who work make lots of friends?	45	0	7

TABLE XIII

SUMMARY SHEET FOR A QUESTIONNAIRE ABOUT THE WORLD OF WORK FOR GRADE 4 .

Question Number	Pre-test Answers			Post-test Answers			Difference in (Pre) - (Post) =		
	YES	NO	DA	YES	NO	DA	YES	NO	DA
1	44	8	0	45	0	7	-1	8	-7
2	42	10	0	34	11	7	8	-1	-7
3	47	5	0	41	4	7	6	1	-7
4	43	9	0	39	6	7	4	3	-7
5	35	17	0	28	17	7	7	0	-7
6	37	15	0	18	26	8	19	-11	-8
7	46	6	0	38	7	7	8	-1	-7
8	46	6	0	43	2	7	3	4	-7
9	37	15	0	30	15	7	7	0	-7
10	36	16	0	13	32	7	23	-16	-7
11	27	25	0	24	21	7	3	4	-7
12	39	13	0	24	21	7	15	-8	-7
13	50	2	0	37	8	7	13	-6	-7
14	48	4	0	41	4	7	7	0	-7
15	37	15	0	30	15	7	7	0	-7
16	50	2	0	45	0	7	5	2	-7
17	15	37	0	8	37	7	7	0	-7
18	32	20	0	3	42	7	29	-22	-7
19	31	21	0	5	42	5	26	-21	-5
20	52	0	0	45	0	7	7	0	-7

TABLE XIV

THIS IS A QUESTIONNAIRE ABOUT THE WORLD OF WORK FOR GRADE 5 . THERE ARE NO RIGHT OR WRONG ANSWERS

PRE-TEST	YES	NO	DA
1. When you finish school do you want to work?	44	4	5
2. Do you think all jobs are important?	40	9	4
3. Do you think people who work are happy?	43	6	4
4. When you get a job do you think you will be a good worker?	43	6	4
5. Do you think people should work hard?	38	11	4
6. Should all grown-ups work?	28	21	4
7. Would you like to have a summer job when you are old enough?	43	6	4
8. Would you like to do an important job?	45	3	5
9. Should people who have families have to work?	33	16	4
10. Should people get money who don't work?	8	41	4
11. Do you think anybody really wants to work?	25	22	6
12. Will you just work hard enough to get by?	24	24	5
13. Do you think you should work to get money?	26	0	4
14. Do you think people who work help other people?	24	0	6
15. Do you like adults who don't work?	14	12	4
16. Do you like adults who work?	26	0	4
17. Do you think people work just for money?	15	11	4
18. Should people ever do a job they don't like?	3	23	4
19. Do you think people who work are unhappy?	4	20	6
20. Do you think people who work make lots of friends?	24	2	4

TABLE XV

THIS IS A QUESTIONNAIRE ABOUT THE WORLD OF WORK FOR GRADE 5 . THERE ARE NO RIGHT OR WRONG ANSWERS

	POST-TEST	YES	NO	DA
1.	When you finish school do you want to work?	47	2	4
2.	Do you think all jobs are important?	37	12	4
3.	Do you think people who work are happy?	43	6	4
4.	When you get a job do you think you will be a good worker?	44	5	4
5.	Do you think people should work hard?	37	11	5
6.	Should all grown-ups work?	21	28	4
7.	Would you like to have a summer job when you are old enough?	43	6	4
8.	Would you like to do an important job?	44	5	4
9.	Should people who have families have to work?	38	11	4
10.	Should people get money who don't work?	17	30	6
11.	Do you think anybody really wants to work?	21	27	5
12.	Will you just work hard enough to get by?	18	31	4
13.	Do you think you should work to get money?	24	3	3
14.	Do you think people who work help other people?	25	1	4
15.	Do you like adults who don't work?	20	7	3
16.	Do you like adults who work?	26	1	3
17.	Do you think people work just for money?	8	19	3
18.	Should people ever do a job they don't like?	1	26	3
19.	Do you think people who work are unhappy?	2	25	3
20.	Do you think people who work make lots of friends?	27	0	3

want to work?" Also, forty-four (44) fifth grade students marked yes on the post-questionnaire survey questions which asked, "When you get a job do you think you will be a good worker?" and "Would you like to do an important job?" The smallest number of yes responses were recorded on the question "Should people ever do a job they don't like?"

The differences in the pre-post questionnaire survey for grade five were greatest for questions 6, 10, and 17. Question 10 produced the largest difference. Question 10 asked, "Should people get money who don't work?" The apparent negative direction obtained in question 10 appears to reflect lessons of instructions wherein emphases were placed on circumstances involving an individual receiving financial support when he/she was unable to work.

In the grade five results are numerical quantities which are not consistant for question one (1) through twenty (20). One group of data, for questions thirteen (13) through twenty (20), were eliminated due to an apparent error in recording the data. Therefore, questions one (1) through twelve (12) are based on the results of fifty-three (53) students, and questions thirteen (13) through twenty (20) are based on results of thirty (30) students.

A summary sheet for the questionnaire survey about the world of work is presented as Table XVI.

TABLE XVI

SUMMARY SHEET FOR A QUESTIONNAIRE ABOUT THE WORLD OF WORK FOR GRADE 5 .

Question Number	Pre-test Answers			Post-test Answers			Difference in (Pre) - (Post) =		
	YES	NO	DA	YES	NO	DA	YES	NO	DA
1	44	4	5	47	2	4	-3	2	1
2	40	9	4	37	12	4	3	-3	0
3	43	6	4	43	6	4	0	0	0
4	43	6	4	44	5	4	-1	1	0
5	38	11	4	37	11	5	1	0	-1
6	28	21	4	21	28	4	7	-7	0
7	43	6	4	43	6	4	0	0	0
8	45	3	5	44	5	4	1	-2	1
9	33	16	4	38	11	4	-5	5	0
10	8	41	4	17	30	6	-9	11	-2
11	25	22	6	21	27	5	4	-5	1
12	24	24	5	18	31	4	6	-7	1
13	26	0	4	24	3	3	2	-3	1
14	24	0	6	25	1	4	-1	-1	2
15	14	12	4	20	7	3	-6	5	1
16	26	0	4	26	1	3	0	-1	1
17	15	11	4	8	19	3	7	-8	1
18	3	23	4	1	26	3	2	-3	1
19	4	20	6	2	25	3	2	-5	3
20	24	2	4	27	0	3	-3	2	1

Chi-square Treatment of Survey

A normalized chi-square distribution and pre-questionnaire survey results were used to establish the expected frequencies for the chi-sqaure treatment of the results of pre-post questionnaire survey of the world of work at the elementary level. The normalized chi-square distribution and the pre-questionnaire were utilized in an item analysis fashion for the questionnaire survey results.

Pre-questionnaire survey results as expected frequencies.

For each of the twenty (20) questions, the expected frequency value for each cell in the contingency table was based on the number obtained from the pre-questionnaire survey. The contingency table for each question was composed of fifteen cells based on a three (3) by five (5) classification. The three (3) by five (5) classification permitted treatment of the responses of the entire elementary student population on each question. This procedure established the design wherein the total impact of Career Education Research and Development Project at the elementary level could be measured.

Question one on the survey asked, "When you finish school do you want to work?" On the post-questionnaire survey, one hundred ninty-one (191) students responded yes, twenty-nine (29) students marked no, and twenty-eight (28) students did not answer. A chi-square value of 35.17 resulted after statistical treatment. This numerical quantity was significant at the 0.01 level of confidence. After analyzing the contingency table data, it appears that the significant difference was contributed by grades two, three, and four. These data appear in Table XVII.

The results obtained from the chi-square treatment of data on question one appears to indicate that the efforts expended by the staff of the Career Education Project were beneficial in supplying information to students. The change in students' answers seem to be the results of the Career Education Project.

Question two on the survey asked, "Do you think all jobs are important?" On the post-questionnaire survey, one hundred seventy-seven (177) students responded yes, forty-two (42) marked no, and twenty-nine (29) students did not answer question two. A chi-square value of 40.60 resulted after statistical treatment. A chi-square value of 40.60 with 8 degrees of freedom was significant at the 0.01 level of confidence. The chi-square value appeared to be measuring the change that occurred in the responses of grade one and grade three students. These data appear in Table XVIII.

TABLE XVII

Pre-test

Question 1

GRADE	YES	NO	DA	
1	28 (34)	18 (13)	9 (8)	55
2	35 (28)	5 (17)	5 (0)	45
3	36 (26)	4 (15)	3 (2)	43
4	45 (44)	0 (8)	7 (0)	52
5	47 (44)	2 (4)	4 (5)	53
	191	29	28	248

$$\frac{(O-E)^2}{E} = \chi^2$$

GRADE	YES	NO	DA
1	$\frac{36}{34}$ = 1.06	$\frac{25}{13}$ = 1.92	$\frac{1}{8}$ = 0.13
2	$\frac{49}{28}$ = 1.75	$\frac{144}{17}$ = 8.47	$\frac{25}{0}$ = 0.00
3	$\frac{100}{26}$ = 3.85	$\frac{121}{15}$ = 8.07	$\frac{1}{2}$ = 0.50
4	$\frac{1}{44}$ = 0.02	$\frac{64}{8}$ - 8.00	$\frac{49}{0}$ = 0.00
5	$\frac{9}{44}$ = 0.20	$\frac{4}{4}$ = 1.00	$\frac{1}{5}$ = 0.20
	$\Sigma\chi^2 =$ 6.88	$\Sigma\chi^2 =$ 27.46	$\Sigma\chi^2 =$ 0.83

df=8

Significant: * .05=15.51
** .01=20.09

$\Sigma\chi^2 =$ 35.17**

TABLE XVIII

Pre-test

Question 2

GRADE	YES	NO	DA	
1	43 (33)	2 (14)	10 (8)	55
2	31 (32)	9 (13)	5 (0)	45
3	32 (19)	8 (23)	3 (1)	43
4	34 (42)	11 (10)	7 (0)	52
5	37 (40)	12 (9)	4 (4)	53
	177	42	29	248

$$\frac{(O-E)^2}{E} = \chi^2$$

GRADE	YES	NO	DA
1	$\frac{100}{33} = 3.03$	$\frac{144}{14} = 10.29$	$\frac{4}{8} = 0.50$
2	$\frac{1}{32} = 0.03$	$\frac{16}{13} = 1.23$	$\frac{25}{0} = 0.00$
3	$\frac{169}{19} = 8.89$	$\frac{225}{23} = 9.78$	$\frac{4}{1} = 4.00$
4	$\frac{64}{42} = 1.52$	$\frac{1}{10} = 0.10$	$\frac{49}{0} = 0.00$
5	$\frac{9}{40} = 0.23$	$\frac{9}{9} = 1.00$	$\frac{0}{4} = 0.00$
	$\Sigma\chi^2 = 13.70$	$\Sigma\chi^2 = 22.40$	$\Sigma\chi^2 = 4.50$

$\Sigma\chi^2 = 40.60$**

df=8
Significant: * .05=15.51
** .01=20.09

A chi-square value of 40.60 on question two of the survey seemed to connote that the Career Education Project was successful in developing the dignity of work concept at the elementary level. The Calcasieu Parish Project was directed toward a goal of improving the dignity of work concept.

Question three on the survey asked, "Do you think people who work are happy?" Chi-square data for question three are presented in Table XIX. On the post-questionnaire survey, one hundred ninty-nine (199) students responded yes, twenty-two (22) students marked no, and twenty-seven (27) students did not answer question three. A chi-square value of 29.86 resulted after statistical treatment. A chi-square value of 29.86 with 8 degrees of freedom was significant at the 0.01 level of confidence. The chi-square value appeared to be the results of changes that occurred in the responses of students enrolled in grades one, two, and three.

A chi-square value of 29.86 on question three appeared to designate the effects of the Career Education Project. A goal of the project was to disseminate information and construct positive attitudes about the world of work.

Question four on the questionnaire survey asked, "When you get a job do you think you will be a good worker?" On the post-questionnaire survey, two hundred one (201) students responded yes, twenty (20) marked no, and twenty-seven (27) did not answer question four. A chi-square value of 16.08 resulted after statistical treatment of the expected and obtained frequencies. A chi-square value of 16.08 with 8 degrees of freedom was significant at the 0.05 level of confidence, but 16.08 was not significant at the 0.01 level of confidence. The chi-square value of 16.08 appeared to denote a measure of the change which occurred at grade one and grade three. These data for question four appear in Table XX.

An implication obtained from the contingency table of question four seems to be one of enhancing the students' concept of their own abilities. Self-awareness was an integral part of the project's goals and the conjecture is made that the results of question four substantiates the idea that a degree of achievement has been made toward the goal.

Question five on the questionnaire survey asked, "Do you think people should work hard?" An examination of the expected frequencies and the obtained frequencies for question five discloses that a change eventuated in a negative direction. A significant difference did result when the expected and obtained frequencies were treated statistically. A chi-square value of 15.58 with 8 degrees of freedom was significant at the 0.05 level of confidence, but 15.58 with 8 degrees of freedom was not

TABLE XIX

Question 3

Pre-test

GRADE	YES	NO	DA	
1	41 (30)	6 (12)	8 (13)	55
2	35 (31)	5 (14)	5 (0)	45
3	39 (32)	1 (10)	3 (1)	43
4	41 (47)	4 (5)	7 (0)	52
5	43 (43)	6 (6)	4 (4)	53
	199	22	27	248

$$\frac{(O-E)^2}{E} = \chi^2$$

GRADE	YES	NO	DA
1	$\frac{121}{30} = 4.03$	$\frac{36}{12} = 3.00$	$\frac{25}{13} = 1.92$
2	$\frac{16}{31} = 0.52$	$\frac{81}{14} = 5.79$	$\frac{25}{0} = 0.00$
3	$\frac{49}{32} = 1.53$	$\frac{81}{10} = 8.10$	$\frac{4}{1} = 4.00$
4	$\frac{36}{47} = 0.77$	$\frac{1}{5} = 0.20$	$\frac{49}{0} = 0.00$
5	$\frac{0}{43} = 0.00$	$\frac{0}{6} = 0.00$	$\frac{0}{4} = 0.00$
	$\Sigma\chi^2 =$ 6.85	$\Sigma\chi^2 =$ 17.09	$\Sigma\chi^2 =$ 5.92

$\Sigma\chi^2 =$ 29.86**

df=8
Significant: * .05=15.51
** .01=20.09

TABLE XX

Question 4

Pre-test

GRADE	YES	NO	DA	
1	46 (38)	1 (7)	8 (10)	55
2	36 (39)	4 (6)	5 (0)	45
3	36 (40)	4 (2)	3 (1)	43
4	39 (43)	6 (9)	7 (0)	52
5	44 (43)	5 (6)	4 (4)	53
	201	20	27	248

$$\frac{(O-E)^2}{E} = X^2$$

GRADE	YES	NO	DA
1	$\frac{64}{38} = 1.68$	$\frac{36}{7} = 5.14$	$\frac{4}{10} = 0.40$
2	$\frac{9}{39} = 0.23$	$\frac{4}{6} = 0.67$	$\frac{25}{0} = 0.00$
3	$\frac{16}{40} = 0.40$	$\frac{4}{2} = 2.00$	$\frac{4}{1} = 4.00$
4	$\frac{16}{43} = 0.37$	$\frac{9}{9} = 1.00$	$\frac{49}{0} = 0.00$
5	$\frac{1}{43} = 0.02$	$\frac{1}{6} = 0.17$	$\frac{0}{4} = 0.00$
	$\sum X^2 =$ 2.70	$\sum X^2 =$ 8.98	$\sum X^2 =$ 4.40

$\sum X^2 =$ 16.08*

df=8

Significant: * .05=15.51

** .01=20.09

significant at the 0.01 level of confidence. The chi-square value of 15.58 seems to represent change in a positive direction at grade one, little or no change at grade five, and a negative direction for grades two, three, and four. Data for question five are presented in Table XXI.

Question six on the questionnaire survey asked, "Should all grown ups work?" The expected frequencies of the second, fourth, and fifth grades were larger than the obtained frequencies of this question. Grade one students made a change in a positive direction, and grade three students made little change from the expected answers. A significant difference did result after chi-square treatment. A chi-square value of 22.49 with 8 degrees of freedom was significant at the 0.01 level of confidence. Data are presented in Table XXII for question six.

Question seven on the survey asked, "Would you like to have a summer job when you are old enough?" The differences in the results on the pre-survey and post-survey were bipolar inasmuch as some grade levels changed in a positive direction while other grade levels changed in a negative direction. A significant difference in the expected and obtained frequencies did not result for question seven. A chi-square of 11.89 was obtained, but this value was not significant at the 0.05 level of confidence. Students in grade three appear to have contributed the largest sub-total chi-square value as is denoted in the contingency table. These data are presented in Table XXIII.

A chi-square value of 15.19 was the result of the statistically treatment on the responses made to question eight. Presented in Table XXIV are the data for question eight. An examination of the data in Table XXIV reveals that grade one students marked more yes answers, as related to the expected frequencies, than any other grade level. These yes answers were recorded in response to question eight which asked, "Would you like to do an important job?" The chi-square value of 15.19 was not significant at the 0.05 level of confidence.

A chi-square value of 9.77 was not significant at the 0.05 level of confidence for question nine. "Should people who have families have to work?" was the question numbered nine. Grade five students marked more yes answers on the observed frequencies than on the expected frequencies. Each of the other grade levels marked fewer yes answers on the observed frequencies than on the expected frequencies, or the observed and expected frequencies were marked the same. These data are presented in Table XXV.

TABLE XXI

Pre-test

Question 5

GRADE	YES	NO	DA	
1	44 (35)	2 (9)	9 (11)	55
2	34 (38)	6 (7)	5 (0)	45
3	33 (37)	7 (5)	3 (1)	43
4	28 (35)	17 (17)	7 (0)	52
5	37 (38)	11 (11)	5 (4)	53
	176	43	29	248

$\frac{(O-E)^2}{E} = \chi^2$

GRADE	YES	NO	DA
1	$\frac{81}{35}$ - 2.31	$\frac{49}{9}$ = 5.44	$\frac{4}{11}$ = 0.36
2	$\frac{16}{38}$ - 0.42	$\frac{1}{7}$ = 0.14	$\frac{25}{0}$ = 0.00
3	$\frac{16}{37}$ = 0.43	$\frac{4}{5}$ = 0.80	$\frac{4}{1}$ = 4.00
4	$\frac{49}{35}$ = 1.40	$\frac{0}{17}$ = 0.00	$\frac{49}{0}$ = 0.00
5	$\frac{1}{38}$ = 0.03	$\frac{0}{11}$ = 0.00	$\frac{1}{4}$ = 0.25
	$\Sigma\chi^2 =$ 4.59	$\Sigma\chi^2 =$ 6.38	$\Sigma\chi^2 =$ 4.61

$\Sigma\chi^2 =$ 15.58*

df=8
Significant: * .05=15.51
** .01=20.09

TABLE XXII

Question 6

Pre-test

GRADE	YES	NO	DA	
1	34 (29)	14 (18)	7 (8)	55
2	22 (29)	18 (16)	5 (0)	45
3	25 (26)	15 (16)	3 (1)	43
4	18 (37)	26 (15)	8 (0)	52
5	21 (28)	28 (21)	4 (4)	53
	120	101	27	248

$$\frac{(O-E)^2}{E} = \chi^2$$

GRADE	YES	NO	DA
1	$\frac{25}{29} = 0.86$	$\frac{16}{18} = 0.89$	$\frac{1}{8} = 0.13$
2	$\frac{49}{29} = 1.69$	$\frac{4}{16} = 0.25$	$\frac{25}{0} = 0.00$
3	$\frac{1}{26} = 0.04$	$\frac{1}{16} = 0.06$	$\frac{4}{1} = 4.00$
4	$\frac{361}{37} = 9.76$	$\frac{11}{15} = 0.73$	$\frac{64}{0} = 0.00$
5	$\frac{49}{28} = 1.75$	$\frac{49}{21} = 2.33$	$\frac{0}{4} = 0.00$
	$\sum \chi^2 =$ 14.10	$\sum \chi^2 =$ 4.26	$\sum \chi^2 =$ 4.13

df=8

Significant: * .05=15.51

** .01=20.09

$\sum \chi^2 =$ 22.49**

TABLE XXIII

Question 7

Pre-test

GRADE	YES	NO	DA	
1	37 (36)	11 (9)	7 (10)	55
2	31 (30)	9 (15)	5 (0)	45
3	24 (30)	16 (12)	3 (1)	43
4	38 (46)	7 (6)	7 (0)	52
5	43 (43)	6 (6)	4 (4)	53
	173	49	26	248

$\frac{(O-E)^2}{E} = \chi^2$

GRADE	YES	NO	DA
1	$\frac{1}{36} = 0.03$	$\frac{4}{9} = 0.44$	$\frac{9}{10} = 0.90$
2	$\frac{1}{30} = 0.03$	$\frac{36}{15} = 2.40$	$\frac{25}{0} = 0.00$
3	$\frac{36}{30} = 1.20$	$\frac{16}{12} = 1.33$	$\frac{4}{1} = 4.00$
4	$\frac{64}{46} = 1.39$	$\frac{1}{6} = 0.17$	$\frac{49}{0} = 0.00$
5	$\frac{0}{43} = 0.00$	$\frac{0}{6} = 0.00$	$\frac{0}{4} = 0.00$
	$\Sigma\chi^2 =$ 2.65	$\Sigma\chi^2 =$ 4.34	$\Sigma\chi^2 =$ 4.90

$\Sigma\chi^2 = 11.89$

df=8
Significant: * .05=15.51
** .01=20.09

TABLE XXIV

Pre-test

Question 8

GRADE	YES	NO	DA	
1	40 (33)	7 (10)	8 (12)	55
2	35 (35)	5 (10)	5 (0)	45
3	36 (39)	4 (3)	3 (1)	43
4	43 (46)	2 (6)	7 (0)	52
5	44 (45)	5 (3)	4 (5)	53
	198	23	27	248

$$\frac{(O-E)^2}{E} = \chi^2$$

GRADE	YES	NO	DA
1	$\frac{49}{33} = 1.48$	$\frac{9}{10} = 0.90$	$\frac{16}{12} = 1.33$
2	$\frac{0}{35} = 0.00$	$\frac{25}{10} = 2.50$	$\frac{25}{0} = 0.00$
3	$\frac{9}{39} = 0.23$	$\frac{1}{3} = 0.33$	$\frac{4}{1} = 4.00$
4	$\frac{9}{46} = 0.20$	$\frac{16}{6} = 2.67$	$\frac{49}{0} = 0.00$
5	$\frac{1}{45} = 0.02$	$\frac{4}{3} = 1.33$	$\frac{1}{5} = 0.20$
	$\Sigma\chi^2 = 1.93$	$\Sigma\chi^2 = 7.73$	$\Sigma\chi^2 = 5.53$

df=8

Significant: * .05=15.51

** .01=20.09

$\Sigma\chi^2 = 15.19$

TABLE XXV

Question 9

Pre-test

GRADE	YES	NO	DA	
1	32 (32)	15 (12)	8 (11)	55
2	23 (25)	16 (20)	6 (0)	45
3	33 (34)	7 (8)	3 (1)	43
4	30 (37)	15 (15)	7 (0)	52
5	38 (33)	11 (16)	4 (4)	53
	156	64	28	248

$\frac{(O-E)^2}{E} = \chi^2$

GRADE	YES	NO	DA
1	$\frac{0}{32} = 0.00$	$\frac{9}{12} = 0.75$	$\frac{9}{11} = 0.82$
2	$\frac{4}{25} = 0.16$	$\frac{16}{20} = 0.80$	$\frac{36}{0} = 0.00$
3	$\frac{1}{34} = 0.03$	$\frac{1}{8} = 0.13$	$\frac{4}{1} = 4.00$
4	$\frac{49}{37} = 1.32$	$\frac{0}{15} = 0.00$	$\frac{49}{0} = 0.00$
5	$\frac{25}{33} = 0.76$	$\frac{16}{16} = 1.00$	$\frac{0}{4} = 0.00$
	$\Sigma\chi^2 =$ 2.27	$\Sigma\chi^2 =$ 2.68	$\Sigma\chi^2 =$ 4.82

$\Sigma\chi^2 =$ 9.77

df=8
Significant: * .05=15.51
** .01=20.09

A chi-square value of 136.28 was significant at the 0.01 level of confidence for the question numbered ten which asked, "Should people get money who don't work?" The desired results for this question was achieved only at grades three and four. However, when the dignity of the handicapped and aged were considered (units were taught related to social responsibilty) the significant change in responses at grades one, two and five could be expected. Presented in Table XXVI are the data for question ten.

Question eleven on the survey asked, "Do you think anybody really wants to work?" Table XXVII presents the data for question eleven which connotes that a significant difference was not obtained between the expected and observed frequencies. A chi-square value of 13.09 was not significant at the 0.05 level of confidence for this question.

Question twelve on the survey asked, "Will you just work hard enough to get by?" A significant chi-square value of 36.89 was obtained after statistical treatment of the data for question twelve. A goal of the project was directed toward improving the idea of being employed and producing little. The results of question twelve seems to provide a measure of the success of this goal. Data for question twelve are presented in Table XXVIII.

A chi-square value of 32.48 was obtained on question thirteen which asked, "Do you think you should work to get money?" This chi-square value of 32.48 was significant at the 0.01 level of confidence. Data for question thirteen are presented in Table XXIX. Grade four students contributed the largest value to the chi-square total.

Examining the contingency table for question fourteen appears to indicate that desirable results were obtained. A chi-square value of 16.22 was obtained after statistical treatment. Question fourteen asked, "Do you think people who work help other people?" Data for this question appear in Table XXX.

Results of statistical treatment for question fifteen produced a chi-square value of 16.49 This value of 16.49 was significant at the 0.05 level of confidence. Question fifteen asked, "Do you like adults who don't work?" The responses made by the students enrolled at the various grade levels indicate that the results were bipolar in nature. Data for this question are presented in Table XXXI.

Presented in Table XXXII are the data collected for question sixteen. Question sixteen asked, "Do you like adults who work?" A chi-square value of 21.28 was obtained for this question. The value of 21.28 was significant at the 0.01 level of confidence. Grade two students affected the significant chi-square value of 21.28 more than any other grade level.

TABLE XXVI

Pre-test

Question 10

GRADE	YES	NO	DA	
1	31 (10)	20 (30)	4 (15)	55
2	17 (11)	23 (34)	5 (0)	45
3	9 (26)	33 (16)	1 (1)	43
4	13 (36)	32 (16)	7 (0)	52
5	17 (8)	30 (41)	6 (4)	53
	87	138	23	248

$\frac{(O-E)^2}{E} = \chi^2$

GRADE	YES	NO	DA
1	$\frac{441}{10} = 44.10$	$\frac{100}{30} = 3.33$	$\frac{121}{15} = 8.07$
2	$\frac{36}{11} = 3.27$	$\frac{121}{34} = 3.56$	$\frac{25}{0} = 0.00$
3	$\frac{289}{26} = 11.12$	$\frac{289}{16} = 18.06$	$\frac{0}{1} = 0.00$
4	$\frac{529}{36} = 14.69$	$\frac{256}{16} = 16.00$	$\frac{49}{0} = 0.00$
5	$\frac{81}{8} = 10.13$	$\frac{121}{41} = 2.95$	$\frac{4}{4} = 1.00$
	$\Sigma \chi^2 = 83.31$	$\Sigma \chi^2 = 43.90$	$\Sigma \chi^2 = 9.07$

$\Sigma \chi^2 =$ 136.28**

df=8

Significant: * .05=15.51

** .01=20.09

TABLE XXVII

Pre-test

Question 11

GRADE	YES	NO	DA	
1	33 (33)	13 (12)	9 (10)	55
2	21 (31)	19 (14)	5 (0)	45
3	30 (34)	10 (8)	3 (1)	43
4	24 (27)	21 (25)	7 (0)	52
5	21 (25)	27 (22)	5 (6)	53
	129	90	29	248

$$\frac{(O-E)^2}{E} = \chi^2$$

GRADE	YES	NO	DA
1	$\frac{0}{33} = 0.00$	$\frac{1}{12} = 0.08$	$\frac{1}{10} = 0.10$
2	$\frac{100}{31} = 3.23$	$\frac{25}{14} = 1.79$	$\frac{25}{0} = 0.00$
3	$\frac{16}{34} = 0.47$	$\frac{4}{8} = 0.50$	$\frac{4}{1} = 4.00$
4	$\frac{9}{27} = 0.33$	$\frac{16}{25} = 0.64$	$\frac{49}{0} = 0.00$
5	$\frac{16}{25} = 0.64$	$\frac{25}{22} = 1.14$	$\frac{1}{6} = 0.17$
	$\Sigma\chi^2 =$ 4.67	$\Sigma\chi^2 =$ 4.15	$\Sigma\chi^2 =$ 4.27

$\Sigma\chi^2 =$ 13.09

df=8
Significant: * .05=15.51
** .01=20.09

TABLE XXVIII

Pre-test

Question 12

GRADE	YES	NO	DA	
1	40 (37)	6 (7)	9 (11)	55
2	16 (29)	24 (16)	5 (0)	45
3	24 (33)	16 (9)	3 (1)	43
4	24 (39)	21 (13)	7 (0)	52
5	18 (24)	31 (24)	4 (5)	53
	122	98	28	248

$$\frac{(O-E)^2}{E} = \chi^2$$

GRADE	YES	NO	DA
1	$\frac{9}{37}$ = 0.24	$\frac{1}{7}$ = 0.14	$\frac{4}{11}$ = 0.36
2	$\frac{169}{29}$ = 5.83	$\frac{64}{16}$ = 4.00	$\frac{25}{0}$ = 0.00
3	$\frac{81}{33}$ = 2.45	$\frac{49}{9}$ = 5.44	$\frac{4}{1}$ = 4.00
4	$\frac{225}{39}$ = 5.77	$\frac{64}{13}$ = 4.92	$\frac{49}{0}$ = 0.00
5	$\frac{36}{24}$ = 1.50	$\frac{49}{24}$ = 2.04	$\frac{1}{5}$ = 0.20
	$\Sigma\chi^2 =$ 15.79	$\Sigma\chi^2 =$ 16.54	$\Sigma\chi^2 =$ 4.56

df=8

Significant: * .05=15.51
** .01=20.09

$\Sigma\chi^2 =$ 36.89**

TABLE XXIX

Pre-test

Question 13

GRADE	YES	NO	DA	
1	42 (37)	5 (9)	8 (9)	55
2	32 (40)	8 (5)	5 (0)	45
3	37 (40)	3 (2)	3 (1)	43
4	37 (50)	8 (2)	7 (0)	52
5	24 (26)	3 (0)	3 (4)	30
	172	27	26	225

$$\frac{(O-E)^2}{E} = \chi^2$$

GRADE	YES	NO	DA
1	$\frac{25}{37} = 0.68$	$\frac{16}{9} = 1.78$	$\frac{1}{9} = 0.11$
2	$\frac{64}{40} = 1.60$	$\frac{9}{5} = 1.80$	$\frac{25}{0} = 0.00$
3	$\frac{9}{40} = 0.23$	$\frac{1}{2} = 0.50$	$\frac{4}{1} = 4.00$
4	$\frac{169}{50} = 3.38$	$\frac{36}{2} = 18.00$	$\frac{49}{0} = 0.00$
5	$\frac{4}{26} = 0.15$	$\frac{9}{0} = 0.00$	$\frac{1}{4} = 0.25$
	$\Sigma\chi^2 = 6.04$	$\Sigma\chi^2 = 22.08$	$\Sigma\chi^2 = 4.36$

df=8

Significant: * .05=15.51

** .01=20.09

$\Sigma\chi^2 =$ 32.48**

TABLE XXX

Pre-test

Question 14

GRADE	YES	NO	DA	
1	37 (30)	9 (16)	9 (9)	55
2	40 (36)	0 (9)	5 (0)	45
3	39 (38)	2 (3)	2 (2)	43
4	41 (48)	4 (4)	7 (0)	52
5	25 (24)	1 (0)	4 (6)	30
	182	16	27	225

$$\frac{(O-E)^2}{E} = \chi^2$$

GRADE	YES	NO	DA
1	$\frac{49}{30} = 1.63$	$\frac{49}{16} = 3.06$	$\frac{0}{9} = 0.00$
2	$\frac{16}{36} = 0.44$	$\frac{81}{9} = 9.00$	$\frac{25}{0} = 0.00$
3	$\frac{1}{38} = 0.03$	$\frac{1}{3} = 0.33$	$\frac{0}{2} = 0.00$
4	$\frac{49}{48} = 1.02$	$\frac{0}{4} = 0.00$	$\frac{49}{0}$ - 0.00
5	$\frac{1}{24} = 0.04$	$\frac{1}{0} = 0.00$	$\frac{4}{6}$ - 0.67
	$\Sigma\chi^2 =$ 3.16	$\Sigma\chi^2 =$ 12.39	$\Sigma\chi^2 =$ 0.67

df=8
Significant: * .05=15.51
** .01=20.09

$\Sigma\chi^2 =$ 16.22*

TABLE XXXI

Pre-test

Question 15

GRADE	YES	NO	DA	
1	25 (18)	20 (27)	10 (10)	55
2	23 (29)	16 (16)	6 (0)	45
3	17 (20)	23 (22)	3 (1)	43
4	30 (37)	15 (15)	7 (0)	52
5	20 (14)	7 (12)	3 (4)	30
	115	81	29	225

$$\frac{(O-E)^2}{E} = \chi^2$$

GRADE	YES	NO	DA
1	$\frac{49}{18} = 2.72$	$\frac{49}{27} = 1.81$	$\frac{0}{10} = 0.00$
2	$\frac{36}{29} = 1.24$	$\frac{0}{16} = 0.00$	$\frac{36}{0} = 0.00$
3	$\frac{9}{20} = 0.45$	$\frac{1}{22} = 0.05$	$\frac{4}{1} = 4.00$
4	$\frac{49}{37} = 1.32$	$\frac{0}{15} = 0.00$	$\frac{49}{0} = 0.00$
5	$\frac{36}{14} = 2.57$	$\frac{25}{12} = 2.08$	$\frac{1}{4} = 0.25$
	$\Sigma\chi^2 =$ 8.30	$\Sigma\chi^2 =$ 3.94	$\Sigma\chi^2 =$ 4.25

$\Sigma\chi^2 =$ 16.49*

df=8

Significant: * .05=15.51

** .01=20.09

TABLE XXXII

Question 16

Pre-test

GRADE	YES	NO	DA	
1	40 (37)	5 (10)	10 (8)	55
2	36 (29)	4 (16)	5 (0)	45
3	37 (42)	3 (0)	3 (1)	43
4	45 (50)	0 (2)	7 (0)	52
5	26 (26)	1 (0)	3 (4)	30
	184	13	28	225

$$\frac{(O-E)^2}{E} = \chi^2$$

GRADE	YES	NO	DA
1	$\frac{9}{37} = 0.24$	$\frac{25}{10} = 2.50$	$\frac{4}{8} = 0.50$
2	$\frac{49}{29} = 1.69$	$\frac{144}{16} = 9.00$	$\frac{25}{0} = 0.00$
3	$\frac{25}{42} = 0.60$	$\frac{9}{0} = 0.00$	$\frac{4}{1} = 4.00$
4	$\frac{25}{50} = 0.50$	$\frac{4}{2} = 2.00$	$\frac{49}{0} = 0.00$
5	$\frac{0}{26} = 0.00$	$\frac{1}{0} = 0.00$	$\frac{1}{4} = 0.25$
	$\Sigma\chi^2 =$ 3.03	$\Sigma\chi^2 =$ 13.50	$\Sigma\chi^2 =$ 4.75

$\Sigma\chi^2 =$ 21.28**

Significant: df=8
* .05=15.51
** .01=20.09

A chi-square value of 135.95 was obtained when the differences in expected and observed frequencies were treated statistically for question seventeen. Question seventeen asked, "Do you think people work just for money?" After the career education project, a smaller number of first, fourth, and fifth graders answered yes to this question. The chi-square value of 135.95 was significant at the 0.01 level of confidence. These data are contained in Table XXXIII.

The greatest influence of the career education project on the question "Should people ever do a job they don't like?" was recorded for third grade students. A chi-square value of 182.00 was recorded for question eighteen and this value was significant at the 0.01 level. Students enrolled in grades two, four, and five responded in a negative fashion to this question. In Table XXXIV are the data for question eighteen.

Question nineteen on the survey asked, "Do you think people who work are unhappy?" A chi-square value of 73.64 denotes that a significant difference did exist between the observed and expected frequencies at the 0.01 level of confidence for this question. Positive results were obtained for each grade level except grade three. The career education project was termed successful in producing desired change inasmuch as this change can be measured by question nineteen. Presented in Table XXXV are the data for this question.

Question twenty on the survey asked, "Do you think people who work make lots of friends?" A chi-square value of 23.42 was obtained for this question which denoted a significant change at the 0.01 level of confidence. Positive changes, in terms of project goals, occurred at grade levels one, two, and five. The undecided factor controlled grades three and four as may be observed in Table XXXVI. The largest amount of difference occurred at grade one which appears to denote a human growth and development factor that educators working in career education programs should consider when establishing long range goals for career education.

The chi-square values computed using pre-survey scores as expected frequencies and post-survey scores as observed frequencies resulted in sixteen (16) values being termed significant at the 0.05 level of confidence or beyond, and four (4) values that were not significant at the 0.05 level of confidence. These data indicated that a change did result in the responses made by elementary students enrolled in the project site elementary school to the questions on the pre-questionnaire survey of the world of work and the post-questionnaire survey of the world of work.

TABLE XXXIII

Pre-test

Question 17

GRADE	YES	NO	DA	
1	21 (28)	23 (17)	11 (10)	55
2	23 (16)	16 (29)	6 (0)	45
3	36 (9)	4 (33)	3 (1)	43
4	8 (15)	37 (37)	7 (0)	52
5	8 (15)	19 (11)	3 (4)	30
	96	99	30	225

$$\frac{(O-E)^2}{E} = \chi^2$$

GRADE	YES	NO	DA
1	$\frac{49}{28} = 1.75$	$\frac{36}{17} = 2.12$	$\frac{1}{10} = 0.10$
2	$\frac{49}{16} = 3.06$	$\frac{169}{29} = 5.83$	$\frac{36}{0} = 0.00$
3	$\frac{729}{9} = 81.00$	$\frac{841}{33} = 25.48$	$\frac{4}{1} = 4.00$
4	$\frac{49}{15} = 3.27$	$\frac{0}{37} = 0.00$	$\frac{49}{0} = 0.00$
5	$\frac{49}{15} = 3.27$	$\frac{64}{11} = 5.82$	$\frac{1}{4} = 0.25$
	$\Sigma\chi^2 = 92.35$	$\Sigma\chi^2 = 39.25$	$\Sigma\chi^2 = 4.35$

$\Sigma\chi^2 = 135.95$**

df=8

Significant: * .05=15.51

** .01=20.09

TABLE XXXIV

Pre-test

Question 18

GRADE	YES	NO	DA	
1	12 (8)	32 (36)	11 (11)	55
2	7 (9)	34 (36)	4 (0)	45
3	38 (9)	2 (33)	3 (1)	43
4	3 (32)	42 (20)	7 (0)	52
5	1 (3)	26 (23)	3 (4)	30
	61	136	28	225

$\frac{(O-E)^2}{E} = \chi^2$

GRADE	YES	NO	DA
1	$\frac{16}{8} = 2.00$	$\frac{16}{36} = 0.44$	$\frac{0}{11} = 0.00$
2	$\frac{4}{9} = 0.44$	$\frac{4}{36} = 0.11$	$\frac{16}{0} = 0.00$
3	$\frac{841}{9} = 93.44$	$\frac{961}{33} = 29.12$	$\frac{4}{1} = 4.00$
4	$\frac{841}{32} = 26.28$	$\frac{484}{20} = 24.20$	$\frac{49}{0} = 0.00$
5	$\frac{4}{3} = 1.33$	$\frac{9}{23} = 0.39$	$\frac{1}{4} = 0.25$
	$\Sigma\chi^2 = 123.49$	$\Sigma\chi^2 = 54.26$	$\Sigma\chi^2 = 4.25$

$\Sigma\chi^2 = 182.00$**

df=8

Significant: * .05=15.51

** .01=20.09

TABLE XXXV

Question 19

Pre-test

GRADE	YES	NO	DA	
1	17 (27)	20 (18)	18 (10)	55
2	17 (19)	22 (26)	6 (0)	45
3	33 (23)	7 (19)	3 (1)	43
4	5 (31)	42 (21)	5 (0)	52
5	2 (4)	25 (20)	3 (6)	30
	74	116	35	225

$\frac{(O-E)^2}{E} = \chi^2$

GRADE	YES	NO	DA
1	$\frac{100}{27} = 3.70$	$\frac{4}{18} = 0.22$	$\frac{64}{10} = 6.40$
2	$\frac{4}{19} = 0.21$	$\frac{16}{26} = 0.62$	$\frac{36}{0} = 0.00$
3	$\frac{100}{23} = 4.35$	$\frac{144}{19} = 7.58$	$\frac{4}{1} = 4.00$
4	$\frac{676}{31} = 21.81$	$\frac{441}{21} = 21.00$	$\frac{25}{0} = 0.00$
5	$\frac{4}{4} = 1.00$	$\frac{25}{20} = 1.25$	$\frac{9}{6} = 1.50$
	$\Sigma\chi^2 = 31.07$	$\Sigma\chi^2 = 30.67$	$\Sigma\chi^2 = 11.90$

df=8

Significant: * .05=15.51

** .01=20.09

$\Sigma\chi^2 =$ 73.64**

TABLE XXXVI

Pre-test

Question 20

GRADE	YES	NO	DA	
1	43 (35)	5 (5)	7 (15)	55
2	40 (39)	0 (4)	5 (2)	45
3	38 (41)	2 (1)	3 (1)	43
4	45 (52)	0 (0)	7 (0)	52
5	27 (24)	0 (2)	3 (4)	30
	193	7	25	225

$$\frac{(O-E)^2}{E} = \chi^2$$

GRADE	YES	NO	DA
1	$\frac{64}{35} = 1.83$	$\frac{0}{5} = 0.00$	$\frac{64}{15} = 4.27$
2	$\frac{1}{39} = 0.03$	$\frac{16}{4} = 4.00$	$\frac{9}{2} = 4.50$
3	$\frac{9}{41} = 0.22$	$\frac{1}{1} = 1.00$	$\frac{4}{1} = 4.00$
4	$\frac{49}{52} = 0.94$	$\frac{0}{0} = 0.00$	$\frac{49}{0} = 0.00$
5	$\frac{9}{24} = 0.38$	$\frac{4}{2} = 2.00$	$\frac{1}{4} = 0.25$
	$\Sigma\chi^2 = 3.40$	$\Sigma\chi^2 = 7.00$	$\Sigma\chi^2 = 13.02$

$\Sigma\chi^2 = 23.42$**

df=8
Significant: * .05=15.51
** .01=20.09

Normalized chi-square distribution as expected frequencies. For each of the following questions that were contained on the pre-post questionnaire survey of the world of work, the expected frequency value for each cell in the contingency table was based on a normalized chi-square distribution. The contingency table for each question was composed of fifteen cells based on a three (3) by five (5) classification. The chi-square analysis permitted the treatment of the differences in responses of the entire elementary school enrollment on each question. This procedure established the design wherein the total input of the Career Education Research and Development Project could be measured at the elementary level.

Question one data are presented in Table XXXVII. Examining the contingency table indicates that each group of students except grade one made changes in a positive direction. The chi-square value for question one of 39.86 was significant at the 0.01 level of confidence. Question one asked, "When you finish school do you want to work?" With the change in a positive direction being significant, it appears that the Career Education Project achieved some success in building constructive concepts about the world of work.

Question two on the survey asked, "Do you think all jobs are important?" The chi-square value for question two was 12.10 which was not significant at the 0.05 level of confidence. However, the expected frequency value was surpassed at grades one and three by the observed frequency value. Relative to the goals of the project, grade one students and grade three students were affected most by the Career Education Project. Presented in Table XXXVIII are the data for question two.

In the course of analyzing the data for question three, the assertion was made that students in grade three were influenced by the career education activities. A chi-square value of 6.29 was obtained for question three, and the largest part of this composite value was attributed to differences occurring in grade three. The data for question three are presented in Table XXXIX. Since the chi-square value for question three was not significant at the 0.05 level of confidence, inferential usage of these data appear limited.

A chi-square value of 6.10 was obtained for question four which asked, "When you get a job do you think you will be a good worker?" The chi-square value of 6.10 was not significant at the 0.05 level of confidence. When the contingency table data were analyzed, grade one students appeared to have contributed the largest difference in a positive direction. Data for question four are presented in Table XL.

TABLE XXXVII

Question 1 General

GRADE	YES	NO	DA	
1	28 (42.4)	18 (6.4)	9 (6.02)	55
2	35 (34.7)	5 (5.3)	5 (5.1)	45
3	36 (33.1)	4 (5.0)	3 (4.9)	43
4	45 (40.1)	0 (6.1)	7 (5.9)	52
5	47 (40.8)	2 (6.2)	4 (6.0)	53
	191	29	28	248

$$\frac{(O-E)^2}{E} = \chi^2$$

GRADE	YES	NO	DA
1	$\frac{207.36}{42.4} = 4.89$	$\frac{134.56}{6.4} = 21.03$	$\frac{7.84}{6.2} = 1.26$
2	$\frac{0.09}{34.7} = 0.00$	$\frac{.09}{5.3} = 0.02$	$\frac{0.01}{5.1} = 0.00$
3	$\frac{8.41}{33.1} = 0.25$	$\frac{1.00}{5.0} = 0.20$	$\frac{3.61}{4.9} = 0.74$
4	$\frac{24.01}{40.1} = 0.60$	$\frac{37.21}{6.1} = 6.10$	$\frac{1.21}{5.9} = 0.21$
5	$\frac{38.44}{40.8} = 0.94$	$\frac{17.64}{6.2} = 2.85$	$\frac{4.00}{6.0} = 0.67$
	$\Sigma\chi^2 = 6.68$	$\Sigma\chi^2 = 30.20$	$\Sigma\chi^2 = 2.88$

df=8
Significant: * .05=15.51
** .01=20.09

$\Sigma\chi^2 = 39.76$**

TABLE XXXVIII

Question 2 General

GRADE	YES	NO	DA	
1	43 (39.3)	2 (9.3)	10 (6.4)	55
2	31 (32.1)	9 (7.6)	5 (5.3)	45
3	32 (30.7)	8 (7.3)	3 (5.0)	43
4	34 (37.1)	11 (8.8)	7 (6.1)	52
5	37 (37.8)	12 (9.0)	4 (6.2)	53
	177	42	29	248

$$\frac{(O-E)^2}{E} = \chi^2$$

GRADE	YES	NO	DA
1	$\frac{13.7}{39.3} = 0.35$	$\frac{53.3}{9.3} = 5.73$	$\frac{12.96}{6.4} = 2.03$
2	$\frac{1.21}{32.1} = 0.04$	$\frac{1.96}{7.6} = 0.26$	$\frac{0.09}{5.3} = 0.02$
3	$\frac{1.69}{30.7} = 0.06$	$\frac{0.49}{7.3} = 0.07$	$\frac{4.0}{5.0} = 0.80$
4	$\frac{9.61}{37.1} = 0.26$	$\frac{4.84}{8.8} = 0.55$	$\frac{0.81}{6.1} = 0.13$
5	$\frac{0.64}{37.8} = 0.02$	$\frac{9.0}{9.0} = 1.00$	$\frac{4.84}{6.2} = 0.78$
	$\Sigma\chi^2 = 0.73$	$\Sigma\chi^2 = 7.61$	$\Sigma\chi^2 = 3.76$

$\Sigma\chi^2 = 12.10$

df=8
Significant: * .05=15.51
** .01=20.09

TABLE XXXIX

Question 3 General

GRADE	YES	NO	DA	
1	41 (44.1)	6 (4.9)	8 (6.0)	55
2	35 (36.1)	5 (4.0)	5 (4.9)	45
3	39 (34.5)	1 (3.8)	3 (4.7)	43
4	41 (41.7)	4 (4.6)	7 (5.7)	52
5	43 (42.5)	6 (4.7)	4 (5.8)	53
	199	22	27	248

$\frac{(O-E)^2}{E} = \chi^2$

GRADE	YES	NO	DA
1	$\frac{9.61}{44.1} = 0.22$	$\frac{1.21}{4.9} = 0.25$	$\frac{4.0}{6.0} = 0.67$
2	$\frac{1.21}{36.1} = 0.03$	$\frac{1.00}{4.0} = 0.25$	$\frac{0.01}{4.9} = 0.00$
3	$\frac{30.25}{34.5} = 0.88$	$\frac{7.84}{3.8} = 2.06$	$\frac{2.89}{4.7} = 0.61$
4	$\frac{0.49}{41.7} = 0.01$	$\frac{0.36}{4.6} = 0.08$	$\frac{1.69}{5.7} = 0.30$
5	$\frac{0.25}{42.5} = 0.01$	$\frac{1.69}{4.7} = 0.36$	$\frac{3.24}{5.8} = 0.56$
	$\sum\chi^2 = 1.15$	$\sum\chi^2 = 3.00$	$\sum\chi^2 = 2.14$

df=8

Significant: * .05=15.51
** .01=20.09

$\sum\chi^2 = 6.29$

TABLE XL

Question 4 General

GRADE	YES	NO	DA	
1	46 (44.6)	1 (4.4)	8 (6.0)	55
2	36 (36.5)	4 (3.6)	5 (4.9)	45
3	36 (34.9)	4 (3.5)	3 (4.7)	43
4	39 (42.2)	6 (4.2)	7 (5.7)	52
5	44 (43.0)	5 (4.3)	4 (5.8)	53
	201	20	27	248

$$\frac{(O-E)^2}{E} = \chi^2$$

GRADE	YES	NO	DA
1	$\frac{1.96}{44.6} = 0.04$	$\frac{11.56}{4.4} = 2.63$	$\frac{4.00}{6.0} = 0.67$
2	$\frac{0.25}{36.5} = 0.01$	$\frac{0.16}{3.6} = 0.04$	$\frac{0.01}{4.9} = 0.00$
3	$\frac{1.21}{34.9} = 0.03$	$\frac{0.25}{3.5} = 0.07$	$\frac{2.89}{4.7} = 0.61$
4	$\frac{10.24}{42.2} = 0.24$	$\frac{3.24}{4.2} = 0.77$	$\frac{1.69}{5.7} = 0.30$
5	$\frac{1.00}{43.0} = 0.02$	$\frac{0.49}{4.3} = 0.11$	$\frac{3.24}{5.8} = 0.56$
	$\Sigma\chi^2 = 0.34$	$\Sigma\chi^2 = 3.62$	$\Sigma\chi^2 = 2.14$

$\Sigma\chi^2 = 6.10$

df=8

Significant: * .05=15.51

** .01=20.09

Question five on the survey asked, "Do you think people should work hard?" A significant chi-square of 19.13 was obtained for this question. The largest degree of change was attributed to fourth grade students whose responses appeared to be different in a negative fashion. Positive changes which contributed to the total chi-square value were recorded at grades one, two, and three. From the results of this question, it appeared that the Career Education Project was successful in grades one, two, and three. The results appear in Table XLI.

The results recorded by students in the pre-questionnaire survey and on the post-questionnaire survey did not indicate a significant difference for question six. The chi-square value of 14.60 was not significant at the 0.05 level of confidence, however, a change did occur in a positive direction for grades one and three, and a change did occur in a negative direction for grades four and five. Question six asked, "Should all grown-ups work?" The bipolar nature of these data prohibits the inferential use of the data. Presented in Table XLII are the data for question six.

A chi-square value of 13.56 was computed for question seven which asked, "Would you like to have a summer job when you are old enough?" This chi-square value of 13.56 was not significant at the 0.05 level of confidence. Presented in Table XLIII, the data for question seven indicates that fourth and fifth grade students made a positive change while students in grades one, two, and three remained stable or changed in a negative direction.

Question eight on the survey asked, "Would you like to do an important job?" Data for this question are presented in Table XLIV. These data indicate that an increase in yes responses were made by students enrolled in grades three, four, and five on the post-questionnaire survey. A chi-square value of 5.20 for question eight was not significant at the 0.05 level of confidence. This chi-square value does not permit inferential usage of these data.

A computational process using expected and observed frequencies was used to compute a chi-square value of 9.60 for question nine. This value was not significant at the 0.05 level of confidence. However, positive change was observed for students enrolled in grades three and five. Question nine on the survey asked, "Should people who have families have to work?" Data for this question appears in Table XLV.

A chi-square value of 22.80 was computed for question ten which asked, "Should people get money who don't work?" Desired results were obtained relative to the responses made on this

TABLE XLI

Question 5 General

GRADE	YES	NO	DA	
1	44 (39.3)	2 (9.5)	9 (6.4)	55
2	34 (31.9)	6 (7.8)	5 (5.3)	45
3	33 (30.5)	7 (7.5)	3 (5.0)	43
4	28 (36.9)	17 (9.0)	7 (6.1)	52
5	37 (37.6)	11 (9.2)	5 (6.2)	53
	176	43	29	248

$$\frac{(O-E)^2}{E} = \chi^2$$

GRADE	YES	NO	DA
1	$\frac{22.09}{39.3} = 0.56$	$\frac{56.25}{9.5} = 5.92$	$\frac{6.76}{6.4} = 1.06$
2	$\frac{4.41}{31.9} = 0.14$	$\frac{3.24}{7.8} = 0.42$	$\frac{0.09}{5.3} = 0.02$
3	$\frac{6.25}{30.5} = 0.20$	$\frac{0.25}{7.5} = 0.03$	$\frac{4.0}{5.0} = 0.80$
4	$\frac{79.21}{36.9} = 2.15$	$\frac{64.00}{9.0} = 7.11$	$\frac{0.81}{6.1} = 0.13$
5	$\frac{0.36}{37.6} = 0.01$	$\frac{3.24}{9.2} = 0.35$	$\frac{1.44}{6.2} = 0.23$
	$\Sigma\chi^2 = 3.06$	$\Sigma\chi^2 = 13.83$	$\Sigma\chi^2 = 2.24$

$\Sigma\chi^2 = 19.13$*

df=8
Significant: * .05=15.51
** .01=20.09

TABLE XLII

Question 6 General

GRADE	YES	NO	DA	
1	34 (26.6)	14 (22.4)	7 (6.0)	55
2	22 (21.8)	18 (18.3)	5 (4.9)	45
3	25 (20.8)	15 (17.5)	3 (4.7)	43
4	18 (25.2)	26 (21.2)	8 (5.7)	52
5	21 (25.7)	28 (21.6)	4 (5.8)	53
	120	101	27	248

$\frac{(O-E)^2}{E} = \chi^2$

GRADE	YES	NO	DA
1	$\frac{54.76}{26.6} = 2.06$	$\frac{70.56}{22.4} = 3.15$	$\frac{1.00}{6.0} = 0.17$
2	$\frac{0.04}{21.8} = 0.00$	$\frac{0.09}{18.3} = 0.00$	$\frac{0.01}{4.9} = 0.00$
3	$\frac{17.64}{20.8} = 0.85$	$\frac{6.25}{17.5} = 0.36$	$\frac{2.89}{4.7} = 0.61$
4	$\frac{51.84}{25.2} = 2.06$	$\frac{23.04}{21.2} = 1.09$	$\frac{5.29}{5.7} = 0.93$
5	$\frac{22.09}{25.7} = 0.86$	$\frac{40.96}{21.6} = 1.90$	$\frac{3.24}{5.8} = 0.56$
	$\Sigma\chi^2 = 5.83$	$\Sigma\chi^2 = 6.50$	$\Sigma\chi^2 = 2.27$

$\Sigma\chi^2 = 14.60$

df=8
Significant: * .05=15.51
** .01=20.09

TABLE XLIII

Question 7 General

GRADE	YES	NO	DA	
1	37 (38.4)	11 (10.9)	7 (5.8)	55
2	31 (31.4)	9 (8.9)	5 (5.3)	45
3	24 (30.0)	16 (8.5)	3 (4.5)	43
4	38 (36.3)	7 (10.3)	7 (5.5)	52
5	43 (37.0)	6 (10.5)	4 (5.6)	53
	173	49	26	248

$$\frac{(O-E)^2}{E} = \chi^2$$

GRADE	YES	NO	DA
1	$\frac{1.96}{38.4} = 0.05$	$\frac{0.01}{10.9} = 0.00$	$\frac{1.44}{5.8} = 0.25$
2	$\frac{0.16}{31.4} = 0.01$	$\frac{0.01}{8.9} = 0.00$	$\frac{0.09}{5.3} = 0.02$
3	$\frac{36.0}{30.0} = 1.20$	$\frac{56.25}{8.5} = 6.62$	$\frac{2.25}{4.5} = 0.50$
4	$\frac{2.89}{36.3} = 0.08$	$\frac{10.89}{10.3} = 1.06$	$\frac{2.25}{5.5} = 0.41$
5	$\frac{36.0}{37.0} = 0.97$	$\frac{20.3}{10.5} = 1.93$	$\frac{2.56}{5.6} = 0.46$
	$\Sigma\chi^2 = 2.31$	$\Sigma\chi^2 = 9.61$	$\Sigma\chi^2 = 1.64$

$\Sigma\chi^2 = 13.56$

df=8
Significant: * .05=15.51
** .01=20.09

TABLE XLIV

Question 8 General

GRADE	YES	NO	DA	
1	40 (43.9)	7 (5.1)	8 (6.0)	55
2	35 (35.9)	5 (4.2)	5 (4.9)	45
3	36 (34.3)	4 (4.0)	3 (4.7)	43
4	43 (41.5)	2 (4.8)	7 (5.7)	52
5	44 (42.3)	5 (4.9)	4 (5.8)	53
	198	23	27	248

$\frac{(O-E)^2}{E} = \chi^2$

GRADE	YES	NO	DA
1	$\frac{15.21}{43.9} = 0.35$	$\frac{3.61}{5.1} = 0.71$	$\frac{4.00}{6.0} = 0.67$
2	$\frac{0.81}{35.9} = 0.02$	$\frac{0.64}{4.2} = 0.15$	$\frac{0.01}{4.9} = 0.00$
3	$\frac{2.89}{34.3} = 0.08$	$\frac{0.00}{4.0} = 0.00$	$\frac{2.89}{4.7} = 0.61$
4	$\frac{2.25}{41.5} = 0.05$	$\frac{7.84}{4.8} = 1.63$	$\frac{1.69}{5.7} = 0.30$
5	$\frac{2.89}{42.3} = 0.07$	$\frac{0.01}{4.9} = 0.00$	$\frac{3.24}{5.8} = 0.56$
	$\Sigma\chi^2 =$ 0.57	$\Sigma\chi^2 =$ 2.49	$\Sigma\chi^2 =$ 2.14

$\Sigma\chi^2 =$ 5.20

df=8
Significant: * .05=15.51
** .01=20.09

TABLE XLV

Question 9 General

GRADE	YES	NO	DA	
1	32 (34.6)	15 (14.2)	8 (6.2)	55
2	23 (28.3)	16 (11.6)	6 (5.1)	45
3	33 (27.1)	7 (11.1)	3 (4.9)	43
4	30 (32.7)	15 (13.4)	7 (5.9)	52
5	38 (33.3)	11 (13.7)	4 (6.0)	53
	156	64	28	248

$\frac{(O-E)^2}{E} = \chi^2$

GRADE	YES	NO	DA
1	$\frac{6.76}{34.6} = 0.20$	$\frac{0.64}{14.2} = 0.05$	$\frac{3.24}{6.2} = 0.52$
2	$\frac{28.09}{28.3} = 0.99$	$\frac{19.36}{11.6} = 1.67$	$\frac{0.81}{5.1} = 0.16$
3	$\frac{34.81}{27.1} = 1.28$	$\frac{16.81}{11.1} = 1.51$	$\frac{3.61}{4.9} = 0.74$
4	$\frac{7.29}{32.7} = 0.22$	$\frac{2.56}{13.4} = 0.19$	$\frac{1.21}{5.9} = 0.21$
5	$\frac{22.09}{33.3} = 0.66$	$\frac{7.29}{13.7} = 0.53$	$\frac{4.0}{6.0} = 0.67$
	$\Sigma\chi^2 =$ 3.35	$\Sigma\chi^2 =$ 3.95	$\Sigma\chi^2 =$ 2.30

$\Sigma\chi^2 =$ 9.60

df=8
Significant: * .05=15.51
** .01=20.09

question. The dichotomy which appears in these data is explainable in terms of the career awareness program and the beginning exploration program. The chi-square value of 22.80 was significant at the 0.01 level of confidence. These data appear in Table XLVI.

Question eleven on the questionnaire survey asked, "Do you think anybody really wants to work?" Career education activities appeared to have influenced grade one and grade three students to a greater extent than any other group of students relative to the responses made on question eleven. Numerical data for question eleven appears in Table XLVII. A chi-square value of 16.21 was calculated for question eleven. This value was significant at the 0.05 level of confidence.

Question twelve data are presented in Table XLVIII. Question twelve asked, "Will you just work hard enough to get by?" A chi-square value of 32.15 was computed for this question. This value was significant at the 0.05 level of confidence which indicated that a change between expected and observed frequencies did occur.

Project goals were achieved in terms of question twelve at grades two, four, and five. A regression from yes answers appeared to denote project success.

A chi-square value of 5.57 was computed from the responses made to question thirteen. This 5.57 value was not significant at the 0.05 level of confidence. Question thirteen had asked, "Do you think you should work to get money?" Third and fifth grade students responded in a positive fashion to this question. Students in grade one were observed to have answered the questions in the expected manner. Students in grades two and four regressed in terms of the expected frequencies on this question. Data for question thirteen are presented in Table XLIX.

A majority of the elementary students were affected by the project activities in terms of their responses to question fourteen which asked, "Do you think people who work help other people?" Students in grades two, three, and five made progress toward the project goals as question fourteen reflects these goals. For question fourteen, a chi-square value of 16.05 was computed, and 16.05 was determined to be significant at the 0.05 level of confidence. Data for question fourteen appears in Table L.

Question fifteen on the survey asked, "Do you like adults who don't work?" Students enrolled in grades one, two, and three made progress toward project goals. Students enrolled in grades four and five made changes that were determined to be negative. A chi-square value of 11.55 was not significant at the 0.05 level of confidence which indicates that none of the existing differences

TABLE XLVI

Question 10 General

GRADE	YES	NO	DA	
1	31 (19.3)	20 (30.6)	4 (5.1)	55
2	17 (15.8)	23 (25.0)	5 (4.2)	45
3	9 (15.1)	33 (23.9)	1 (4.0)	43
4	13 (18.2)	32 (28.9)	7 (4.8)	52
5	17 (18.6)	30 (29.5)	6 (4.9)	53
	87	138	23	248

$\frac{(O-E)^2}{E} = \chi^2$

GRADE	YES	NO	DA
1	$\frac{136.89}{19.3} = 7.09$	$\frac{112.36}{30.6} = 3.67$	$\frac{1.21}{5.1} = 0.24$
2	$\frac{1.44}{15.8} = 0.09$	$\frac{4.00}{25.0} = 0.16$	$\frac{0.64}{4.2} = 0.15$
3	$\frac{37.21}{15.1} = 2.46$	$\frac{82.81}{23.9} = 3.46$	$\frac{9.00}{4.0} = 2.25$
4	$\frac{27.04}{18.2} = 1.49$	$\frac{9.61}{28.9} = 0.33$	$\frac{4.84}{4.8} = 1.01$
5	$\frac{2.56}{18.6} = 0.14$	$\frac{0.25}{29.5} = 0.01$	$\frac{1.21}{4.9} = 0.25$
	$\Sigma\chi^2 =$ 11.27	$\Sigma\chi^2 =$ 7.63	$\Sigma\chi^2 =$ 3.90

$\Sigma\chi^2 =$ 22.80**

df=8
Significant: * .05=15.51
** .01=20.09

TABLE XLVII

Question 11 General

GRADE	YES	NO	DA	
1	33 (28.6)	13 (20.0)	9 (6.4)	55
2	21 (23.4)	19 (16.3)	5 (5.3)	45
3	30 (22.4)	10 (15.6)	3 (5.0)	43
4	24 (27.1)	21 (18.9)	7 (6.1)	52
5	21 (27.6)	27 (19.2)	5 (6.2)	53
	129	90	29	248

$\frac{(O-E)^2}{E} = \chi^2$

GRADE	YES	NO	DA
1	$\frac{19.36}{28.6} = 0.68$	$\frac{49.00}{20.0} = 2.45$	$\frac{6.76}{6.4} = 1.06$
2	$\frac{5.76}{23.4} = 0.25$	$\frac{10.89}{16.3} = 0.67$	$\frac{0.09}{5.3} = 0.02$
3	$\frac{57.76}{22.4} = 2.58$	$\frac{31.36}{15.6} = 2.01$	$\frac{4.00}{5.0} = 0.80$
4	$\frac{9.61}{27.1} = 0.35$	$\frac{4.41}{18.9} = 0.23$	$\frac{0.81}{6.1} = 0.13$
5	$\frac{43.56}{27.6} = 1.58$	$\frac{60.84}{19.2} = 3.17$	$\frac{1.44}{6.2} = 0.23$
	$\Sigma\chi^2 =$ 5.44	$\Sigma\chi^2 =$ 8.53	$\Sigma\chi^2 =$ 2.24

$\Sigma\chi^2 = 16.21$*

df=8
Significant: * .05=15.51
** .01=20.09

TABLE XLVIII

Question 12 General

GRADE	YES	NO	DA	
1	40 (27.1)	6 (21.7)	9 (6.2)	55
2	16 (22.1)	24 (17.8)	5 (5.1)	45
3	24 (21.2)	16 (17.0)	3 (4.9)	43
4	24 (25.6)	21 (20.6)	7 (5.9)	52
5	18 (26.1)	31 (20.9)	4 (6.0)	53
	122	98	28	248

$\frac{(O-E)^2}{E} = \chi^2$

GRADE	YES	NO	DA
1	$\frac{166.41}{27.1} = 6.14$	$\frac{246.49}{21.7} = 11.36$	$\frac{7.84}{6.2} = 1.26$
2	$\frac{37.21}{22.1} = 1.68$	$\frac{38.44}{17.8} = 2.16$	$\frac{0.01}{5.1} = 0.00$
3	$\frac{7.84}{21.2} = 0.37$	$\frac{1.00}{17.0} = 0.06$	$\frac{3.61}{4.9} = 0.74$
4	$\frac{2.56}{25.6} = 0.10$	$\frac{0.16}{20.6} = 0.01$	$\frac{1.21}{5.9} = 0.21$
5	$\frac{65.61}{26.1} = 2.51$	$\frac{102.01}{20.9} = 4.88$	$\frac{4.00}{6.0} = 0.67$
	$\Sigma\chi^2 = 10.80$	$\Sigma\chi^2 = 18.47$	$\Sigma\chi^2 = 2.88$

$\Sigma\chi^2 = 32.15$**

df=8

Significant: * .05=15.51

** .01=20.09

TABLE XLIX

Question 13 General

GRADE	YES	NO	DA	
1	42 (42.0)	5 (6.6)	8 (6.4)	55
2	32 (34.4)	8 (5.4)	5 (5.2)	45
3	37 (32.9)	3 (5.2)	3 (5.0)	43
4	37 (39.8)	8 (6.2)	7 (6.0)	52
5	24 (22.9)	3 (3.6)	3 (3.5)	30
	172	27	26	225

$$\frac{(O-E)^2}{E} = \chi^2$$

GRADE	YES	NO	DA
1	$\frac{0.00}{42.0} = 0.00$	$\frac{2.56}{6.6} = 0.39$	$\frac{2.56}{6.4} = 0.40$
2	$\frac{5.76}{34.4} = 0.17$	$\frac{6.76}{5.4} = 1.25$	$\frac{0.04}{5.2} = 0.01$
3	$\frac{16.81}{32.9} = 0.51$	$\frac{4.84}{5.2} = 0.93$	$\frac{4.00}{5.0} = 0.80$
4	$\frac{7.84}{39.8} = 0.20$	$\frac{3.24}{6.2} = 0.52$	$\frac{1.00}{6.0} = 0.17$
5	$\frac{1.21}{22.9} = 0.05$	$\frac{0.36}{3.6} = 0.10$	$\frac{0.25}{3.5} = 0.07$
	$\Sigma\chi^2 =$ 0.93	$\Sigma\chi^2 =$ 3.19	$\Sigma\chi^2 =$ 1.45

$\Sigma\chi^2 =$ 5.57

df=8
Significant: * .05=15.51
** .01=20.09

TABLE L

Question 14 General

GRADE	YES	NO	DA	
1	37 (44.5)	9 (3.9)	9 (6.6)	55
2	40 (36.4)	0 (3.2)	5 (5.4)	45
3	39 (34.8)	2 (3.1)	2 (5.2)	43
4	41 (42.1)	4 (3.7)	7 (6.2)	52
5	25 (24.3)	1 (2.1)	4 (3.6)	30
	182	16	27	225

$$\frac{(O-E)^2}{E} = X^2$$

GRADE	YES	NO	DA
1	$\frac{56.25}{44.5} = 1.26$	$\frac{26.01}{3.9} = 6.67$	$\frac{5.76}{6.6} = 0.87$
2	$\frac{12.96}{36.4} = 0.36$	$\frac{10.24}{3.2} = 3.20$	$\frac{0.16}{5.4} = 0.03$
3	$\frac{17.64}{34.8} = 0.51$	$\frac{1.21}{3.1} = 0.39$	$\frac{10.24}{5.2} = 1.97$
4	$\frac{1.21}{42.1} = 0.03$	$\frac{0.09}{3.7} = 0.02$	$\frac{0.64}{6.2} = 0.10$
5	$\frac{0.49}{24.3} = 0.02$	$\frac{1.21}{2.1} = 0.58$	$\frac{0.16}{3.6} = 0.04$
	$\Sigma X^2 =$ 2.18	$\Sigma X^2 =$ 10.86	$\Sigma X^2 =$ 3.01

$\Sigma X^2 =$ 16.05*

df=8

Significant: * .05=15.51

** .01=20.09

were sufficient to be important. Data for question fifteen were recorded in Table LI.

A chi-square value of 8.87 was computed for question sixteen. Question sixteen asked, "Do you like adults who work?" The observed frequencies exceeded the expected frequencies for grades three, four, and five. However, the greatest difference in more than a single cell between expected and observed frequencies occurred at grade one.

The contingency table data for question sixteen denotes that the 'no' answers for grade four produced the largest cell coefficient. These data are presented in Table LII.

Question seventeen asked, "Do you think people work just for money?" A chi-square value of 55.91 was calculated for this question, and this value was determined to be significant at the 0.01 level of confidence. The career education goals were being achieved with respect to students in grades four and five. However, the difference in expected and observed frequencies indicated that the large chi-square value resulted from the responses of grade three students. A significant difference appears to have occurred at grade four. These data appear in Table LIII.

A chi-square value of 112.07 was computed for question eighteen which asked, "Should people ever do a job they don't like?" Students at the grade three level made positive gains toward the concepts inherent in Career Education, and students at the grade three level contributed most of the 112.07 chi-square value. This value of 112.07 was significant at the 0.01 level of confidence. However, a portion of the 112.07 was contributed by differences not aligned with the project goals. Presented in Table LIV are the data for question eighteen.

Question nineteen asked, "Do you think people who work are unhappy?" Students in grade one, four, and five made progress toward project goals. Students enrolled in grade two and three did not mark the answers in the expected manner for question nineteen. A chi-square value of 82.33 was computed for question nineteen. The value of 82.33 was termed significant at the 0.01 level of confidence.

Students enrolled in grades one, four, and five were assumed to have developed concepts congruent with project goals as the goals are reflected by question nineteen. The data for question nineteen are presented in Table LV.

Table LVI presents the data for question twenty which asked, "Do you think people who work make lots of friends?" A chi-square of 12.27 was obtained from the responses made on this

TABLE LI

Question 15 General

GRADE	YES	NO	DA	
1	25 (28.1)	20 (19.8)	10 (7.1)	55
2	23 (23.0)	16 (16.2)	6 (5.8)	45
3	17 (22.0)	23 (15.5)	3 (5.5)	43
4	30 (26.6)	15 (18.7)	7 (6.7)	52
5	20 (15.3)	7 (10.8)	3 (3.9)	30
	115	81	29	225

$\frac{(O-E)^2}{E} = \chi^2$

GRADE	YES	NO	DA
1	$\frac{9.61}{28.1} = 0.34$	$\frac{0.04}{19.8} = 0.00$	$\frac{8.41}{7.1} = 1.18$
2	$\frac{0.00}{23.0} = 0.00$	$\frac{0.04}{16.2} = 0.00$	$\frac{0.04}{5.8} = 0.01$
3	$\frac{25.00}{22.0} = 1.09$	$\frac{56.25}{15.5} = 3.63$	$\frac{6.25}{5.5} = 1.14$
4	$\frac{11.56}{26.6} = 0.43$	$\frac{13.69}{18.7} = 0.73$	$\frac{0.09}{6.7} = 0.01$
5	$\frac{22.09}{15.3} = 1.44$	$\frac{14.44}{10.8} = 1.34$	$\frac{0.81}{3.9} = 0.21$
	$\Sigma\chi^2 = 3.30$	$\Sigma\chi^2 = 5.70$	$\Sigma\chi^2 = 2.55$

$\Sigma\chi^2 = 11.55$

df=8
Significant: * .05=15.51
** .01=20.09

TABLE LII

Question 16 General

GRADE	YES	NO	DA	
1	40 (45.0)	5 (3.2)	10 (6.8)	55
2	36 (36.8)	4 (2.6)	5 (5.6)	45
3	37 (35.2)	3 (2.5)	3 (5.4)	43
4	45 (42.5)	0 (3.0)	7 (6.5)	52
5	26 (24.5)	1 (1.7)	3 (3.7)	30
	184	13	28	225

$$\frac{(O-E)^2}{E} = \chi^2$$

GRADE	YES	NO	DA
1	$\frac{25.00}{45.0} = 0.56$	$\frac{3.24}{3.2} = 1.01$	$\frac{10.24}{6.8} = 1.51$
2	$\frac{0.64}{36.8} = 0.02$	$\frac{1.96}{2.6} = 0.75$	$\frac{0.36}{5.6} = 0.06$
3	$\frac{3.24}{35.2} = 0.09$	$\frac{0.25}{2.5} = 0.10$	$\frac{5.76}{5.4} = 1.07$
4	$\frac{6.25}{42.5} = 0.15$	$\frac{9.00}{3.0} = 3.00$	$\frac{0.25}{6.5} = 0.04$
5	$\frac{2.25}{24.5} = 0.09$	$\frac{0.49}{1.7} = 0.29$	$\frac{0.49}{3.7} = 0.13$
	$\Sigma\chi^2 =$ 0.91	$\Sigma\chi^2 =$ 5.15	$\Sigma\chi^2 =$ 2.81

$\Sigma\chi^2 =$ 8.87

df=8
Significant: * .05=15.51
** .01=20.09

TABLE LIII

Question 17   General

GRADE	YES	NO	DA	
1	21 (23.5)	23 (24.2)	11 (7.3)	55
2	23 (19.2)	16 (19.8)	6 (6.0)	45
3	36 (18.4)	4 (18.9)	3 (5.7)	43
4	8 (22.2)	37 (22.9)	7 (6.9)	52
5	8 (12.8)	19 (13.2)	3 (4.0)	30
	96	99	30	225

$$\frac{(O-E)^2}{E} = \chi^2$$

GRADE	YES	NO	DA
1	$\frac{6.25}{23.5} = 0.27$	$\frac{1.44}{24.2} = 0.06$	$\frac{13.69}{7.3} = 1.88$
2	$\frac{14.44}{19.2} = 0.75$	$\frac{14.44}{19.8} = 0.73$	$\frac{0}{6.0} = 0.00$
3	$\frac{309.76}{18.4} = 16.83$	$\frac{222.01}{18.9} = 11.75$	$\frac{7.29}{5.7} = 1.28$
4	$\frac{201.64}{22.2} = 9.08$	$\frac{198.81}{22.9} = 8.68$	$\frac{0.01}{6.9} = 0.00$
5	$\frac{23.04}{12.8} = 1.80$	$\frac{33.64}{13.2} = 2.55$	$\frac{1.00}{4.0} = 0.25$
	$\Sigma\chi^2 = 28.73$	$\Sigma\chi^2 = 23.77$	$\Sigma\chi^2 = 3.41$

$\Sigma\chi^2 = 55.91$**

df=8
Significant: * .05=15.51
** .01=20.09

TABLE LIV

Question 18 General

GRADE	YES	NO	DA	
1	12 (14.9)	32 (33.2)	11 (6.8)	55
2	7 (12.2)	34 (27.2)	4 (5.6)	45
3	38 (11.7)	2 (26.0)	3 (5.4)	43
4	3 (14.1)	42 (31.4)	7 (6.5)	52
5	1 (8.1)	26 (18.1)	3 (3.7)	30
	61	136	28	225

$$\frac{(O-E)^2}{E} = \chi^2$$

GRADE	YES	NO	DA
1	$\frac{8.41}{14.9} = 0.56$	$\frac{1.44}{33.2} = 0.04$	$\frac{17.64}{6.8} = 2.59$
2	$\frac{27.04}{12.2} = 2.22$	$\frac{46.24}{27.2} = 1.70$	$\frac{2.56}{5.6} = 0.46$
3	$\frac{691.69}{11.7} = 59.12$	$\frac{576.00}{26.0} = 22.15$	$\frac{5.76}{5.4} = 1.07$
4	$\frac{123.21}{14.1} = 8.74$	$\frac{112.36}{31.4} = 3.58$	$\frac{0.25}{6.5} = 0.04$
5	$\frac{50.41}{8.1} = 6.22$	$\frac{62.41}{18.1} = 3.45$	$\frac{0.47}{3.7} = 0.13$
	$\Sigma\chi^2 =$ 76.86	$\Sigma\chi^2 =$ 30.92	$\Sigma\chi^2 =$ 4.29

$\Sigma\chi^2 =$ 112.07**

df=8

Significant: * .05=15.51

** .01=20.09

TABLE LV

Question 19 General

GRADE	YES	NO	DA	
1	17 (18.1)	20 (28.4)	18 (8.6)	55
2	17 (14.8)	22 (23.2)	6 (7.0)	45
3	33 (14.1)	7 (22.2)	3 (6.7)	43
4	5 (17.1)	42 (26.8)	5 (8.1)	52
5	2 (9.9)	25 (15.5)	3 (4.7)	30
	74	116	35	225

$$\frac{(O-E)^2}{E} = X^2$$

GRADE	YES	NO	DA
1	$\frac{1.21}{18.1} = 0.07$	$\frac{70.56}{28.4} = 2.48$	$\frac{88.36}{8.6} = 10.27$
2	$\frac{4.84}{14.8} = 0.33$	$\frac{1.44}{23.2} = 0.06$	$\frac{1.00}{7.0} = 0.14$
3	$\frac{357.21}{14.1} = 25.33$	$\frac{231.04}{22.2} = 10.41$	$\frac{13.69}{6.7} = 2.04$
4	$\frac{146.41}{17.1} = 8.56$	$\frac{231.04}{26.8} = 8.62$	$\frac{9.61}{8.1} = 1.19$
5	$\frac{62.41}{9.9} = 6.30$	$\frac{90.25}{15.5} = 5.82$	$\frac{2.89}{4.7} = 0.61$
	$\Sigma X^2 = 40.59$	$\Sigma X^2 = 27.39$	$\Sigma X^2 = 14.25$

$\Sigma X^2 = 82.23$**

df=8
Significant: * .05=15.51
** .01=20.09

TABLE LVI

Question 20 General

GRADE	YES	NO	DA	
1	43 (47.2)	5 (1.7)	7 (6.1)	55
2	40 (38.6)	0 (1.4)	5 (5.0)	45
3	38 (37.8)	2 (1.3)	3 (4.8)	43
4	45 (44.6)	0 (1.6)	7 (5.8)	52
5	27 (25.7)	0 (0.9)	3 (3.3)	30
	193	7	25	225

$\frac{(O-E)^2}{E} = \chi^2$

GRADE	YES	NO	DA
1	$\frac{17.64}{47.2} = 0.37$	$\frac{10.89}{1.7} = 6.41$	$\frac{0.81}{6.1} = 0.13$
2	$\frac{1.96}{38.6} = 0.05$	$\frac{1.96}{1.4} = 1.40$	$\frac{0.00}{5.0} = 0.00$
3	$\frac{0.04}{37.8} = 0.00$	$\frac{0.49}{1.3} = 0.38$	$\frac{3.24}{4.8} = 0.68$
4	$\frac{0.16}{44.6} = 0.00$	$\frac{2.56}{1.6} = 1.60$	$\frac{1.44}{5.8} = 0.25$
5	$\frac{1.69}{25.7} = 0.07$	$\frac{0.81}{0.9} = 0.90$	$\frac{0.09}{3.3} = 0.03$
	$\Sigma\chi^2 =$ 0.49	$\Sigma\chi^2 =$ 10.69	$\Sigma\chi^2 =$ 1.09

$\Sigma\chi^2 = 12.27$

df=8
Significant: * .05=15.51
** .01=20.09

question. This value was not significant at the 0.05 level of confidence. The contingency table for question twenty provided data that indicated project goals were being reached at an expected level in all grades except grade one. However, the differences which resulted between the expected and observed frequencies were minor.

The chi-square values computed using the normalized chi-square distribution as the expected frequencies and the post-survey results as observed frequencies produced nine (9) chi-square values which were termed significant at or beyond the 0.05 level of confidence. The remaining eleven chi-square values were not significant at or beyond the 0.05 level.

From the normalized chi-square treatment, conclusions can be extracted relative to the progress being made toward project goals. Some of the significant chi-square values were produced from differences which did not indicate program toward project goals. A number of the chi-square values that were not significant provided information in the contingency tables that denoted positive progress toward the project goals.

Summary of chi-square treatment. Chi-square coeffieients were computed for twenty questions that comprised a questionnaire survey of the world of work. Two sets of chi-square coefficients were computed for each question using the total responses made by the students enrolled at the elementary school. One set of chi-square coefficients for the twenty questions was based on pre-questionnaire survey responses as expected frequency values. The second set of chi-square values for the twenty questions was based on a normalized chi-square distribution.

Calcasieu Parish's Career Education Research and Development Project made some gains toward their goals as these goals were reflected in the questionnaire survey. The chi-square values and data contained in the contingency tables did not provide a total measure of the success of the project, however, the assertion can be conjectured that these measures did provide data wherein the general project direction must be considered highly successful.

MIDDLE AND SECONDARY SCHOOL LEVEL INSTRUCTIONAL RESULTS AND ACCOMPLISHMENTS

The following narrative denotes some of the accomplishments and results that indicate the success of the Research and Development Project in Career Education conducted by Calcasieu Parish.

Middle School

Middle School Aids for Curriculum Development. Teaching units were developed through cooperation of subject teachers and the career counselor to be used as patterns in implementing career education in specific subject areas for the ensuing year.

Functional career-oriented units were developed in the areas of language arts, typewriting, business, music, home economics, industrial arts, and arts and crafts. For a delineated presentation of these lessons see Appendix A.

Career Awareness in the Middle School (Students and Faculty). Through scheduled visits to the career resource room students were oriented into the "World of Work", and specifically, introduced to the "15 Job Clusters."

Students were exposed to a wide selection of audio and visual media pertaining to vocations and were encouraged to check out printed materials on careers and self-development for perusal at their leisure.

Approximately five hundred (500) pieces of printed materials were voluntarily checked out by the eight hundred fifty (850) students and faculty members scheduled into the career education resource room six different times during the semester.

Self Awareness in the Middle School. Awareness of self was developed through students' exploration of their interests, abilities, aptitudes and attitudes.

This was accomplished through students' participation in class activities based on careers, hobbies and individual interests.

These self-expressive activities were organized and supervised by career education counselor during regularly scheduled visits into the classrooms.

Exploration and Self-Development in Middle School. Students explored new areas of subject matter, skills and crafts each six weeks during the school semester.

Subjects scheduled were sewing, cooking, arts and crafts, chorus and band. In this manner, each student became aware of his interests and/or aptitudes with a view to later selecting and scheduling such subject areas of interest upon entering high school.

Career Visitation - Middle School. Restaurant involved careers were stressed and the importance of good etiquette was emphasized when a visitation to the Picadilly Cafeteria was made by a home economic class of underachievers. The class was accompanied by the home economic teacher and career education counselor.

The visit to the cafeteria was a new experience to a large number of the students who "ate out" for the very first time in their lives.

A good meal, as well as an enlightening enjoyable hour, resulted followed by a discussion of cafeteria and restaurant-oriented careers.

The following list denotes some of the sites visited by middle school students that were enrolled in the project site.

Middle Schools On-Site-Visitations

Calcasieu Parish Court House
Carpentry Local Union Hall
Air Force Recruiting Station
Calcasieu Parish Jail
Port of Lake Charles
Weather Bureau of Lake Charles
Police Jury Meeting
Lake Charles City Hall
Carpet Mill (Small manufacturing jobs)
Lake Charles Memorial Hospital
District Attorney's Office and Court Session

The summary that follows is an example of the structure involving each on-site visitation made by the students enrolled in the project site schools.

Summary of On-site Visitation

I. Calcasieu Parish Court House
Offices of: Clerk of Court
Tax Assessor
Registrar of Voters

A. Objectives:

1. To observe city officials conducting their jobs

2. To fill out voter registration cards

3. To learn how deeds are registered

B. Number of Participants:
Thirty students participated

C. Class Preparation
Unit presented and studied entitled, "Parish Government"

D. Obtaining Parental Permission
Notes were signed by parents and sent to school giving children permission to go on the trip

E. Discussion of Trip
Children listed new facts learned that were not covered in unit studied.

F. Resource Material
Textbook

G. Follow-up:

1. Students tested as evaluation of visitation

2. Thank you notes written to officials in appreciation for visitation.

Career Awareness Brought to McNeese University. Counselors, who were also graduate students at McNeese State University, were instrumental in orienting McNeese faculty members and fellow-students into the realm of career education.

Career awareness was brought to the campus through counselors' reports and presentations made which emphasized and delineated the objectives of the career education pilot program underway in Calcasieu Parish.

Secondary School

The major results and accomplishments of this project at the secondary level include: (1) A complete survey of the first, second, and third occupational choices of the students in grades 9-12; (2) A study of the differences in interest patterns of secondary students enrolled in a non-college preparatory curriculum and secondary students enrolled in a college preparatory program; (3) A study of communalities between students enrolled in a non-college preparatory curriculum and students enrolled in a college preparatory curriculum based on achievement test scores, intelligence test scores, and interest survey scores; (4) A list of aids for career education implementation into the existing curriculum; (5) A core of teachers who are more aware of the need to place emphasis on subject content and occupational areas requiring subject matter skills; (6) A core of teachers who attempted to structure career education concepts into the lesson and unit plans; (7) A program wherein resource material was supplied to the teachers by the graduate counseling fellow; (8) Students with an increase in the awareness of the world of work information which encompassed an increase in the positive attitudes about the world of work; and, (9) An initial program of guidance which focused in career guidance and counseling.

At the senior high school level the career education program was designed to help students become aware of and prepare for the world of work.

It was hoped that the career counselor could motivate students in a counseling relationship by helping them identify a career goal and assist each student in charting a realistic path by which he may be able to achieve that goal. Another important aspect was to acquaint students with the world of work where they could see the implications of school subjects and occupational roles.

The career counselor's office became an occupational information center and served as an important source of information for both students and the faculty. The goal of the counselor was to assist individuals to participate meaningfully in their own development and assume responsibility for their own direction.

Group sessions were organized through the English classes. A major goal here was to give students some idea of the world of work as follows: (1) occupations can be described according to their relationship of working with data, people, or things; (2) to help students understand various values and goals of work and to examine their own values and goals; (3) to help them become aware of unfamiliar occupations and areas of work; (4) to understand some of the factors which influence a person's occupational choice; and, (5) most important activity was the effort to acquaint students with school subjects and jobs.

The career counselor worked with teachers individually to orient them to the career guidance office and to help them to become involved with the career education concept. Influence on teachers from the career education concept was effective. The teachers developed curricula information related to subjects taught in the classroom. Other teachers in the parish will be able to utilize this curricula information. The teachers, through curriculum revision, may be able to take over much of the giving of career information and the giving of educational information related to career success.

There appears to be a need for a more complete testing program and a need for workshops to make available test results for faculty members to use. This could be a major move in shifting some counseling activities into the classroom by providing teachers more information on the interest and plans of their students. This would contribute much to the ability of youngsters to make career decisions on the basis of greater self-awareness and greater self-understanding

A "Career Day" was held toward the end of the school year. Community resouce speakers visited the campus to develop information regarding their presentation before their speaking engagement. They were asked to bring anything of interest associated with their occupations. They were asked to discuss their work as well as personal experiences within their work and to talk about career possibilities in their field. The speakers were provided with a list of possible things including: (1) Where do you work; (2) Is your field open to both men and women; (3) What does the future appear to be for this job; (4) What kind of schooling was needed; and, (5) What attracted you to your job? Most of the students felt that "Career Day" was beneficial to them.

In summary, it is hoped that we have started the students in this senior high school to develop a plan for life long learning -- that we have given them a clearer picture of their capabilities and potential -- and that we have exposed them to positive attitudes regarding the role of work and provided an opportunity to explore careers while in school.

Career choice list. The students enrolled in the project site secondary school were asked to respond to a survey of first, second, and third career choices. These results of this survey are presented in terms of the number selecting first choice in an occupational area. The data are presented by sex and grade. This information is presented in Appendix C.

Appendix C represents all the students selecting a particular occupation. The second and third choices of this group are presented also.

A summary of first career choices are presented in Tables CLIV - CLVII. These tables provide information regarding occupationalchoice and the following data related to the choice: (1) total number of students; (2) number of students selecting the occupation by grade level; (3) number of students by sex in a grade level; and, (4) the percentage of students at the secondary school selecting the career. These data will be useful in a longitudinal study of students' choices in terms of preparing career education curriculum designs.

Survey of Visits to Counselor's Office. A survey was conducted of the students' interest reflected by their verbal communication as they entered the counselor's office during the second semester seeking career information at the project site secondary school. This survey is reported in Tables CLVIII - CLXI. These tables include data by grade level, total number of visits, and career choice. This survey indicated that a larger number of ninth grade students used the counselor's office in a voluntary fashion than any other grade level. A total of seventy (70) ninth grade students made two hundred six (206) visits to the counselor's office. Thirty-four (34) tenth grade students visited the office forty-eight (48) times during the secondsemester. Twenty-seven (27) eleventh and twelfth grade students used the office twenty-seven (27) times during the second semester. See Appendix C for the above mentioned tables.

Placement Component

Placement. Placement was a part of the career education program. In interviewing a student who was seeking part time employment, the career counselor tried to determine his interests, preference, and to assess these indices in terms of abilities. The job seeker was provided with guidelines on how to conduct himself during an interview.

Calcasieu Parish Career Education was successful in setting up a placement file at Barbe High School, which deals with placement of all students, part-time, full time, cooperative programs, etc.

The student filled out application, files were set up in color code (white for girls; yellow for boys), and filed. These forms can be seen in Appendix D.

It was noted that the most successful placement came through the cooperative program. The reason for this is that there is: (1) a sixteen (16) year age limit on employment of students; (2) competition with the local college placement service; (3) the unexperienced vs experienced. McNeese State University has a very effective placement office, therefore, because most business people would prefer the 18-24 age with experience, the high school placement must take a second seat to it. The cooperative programs at the high school level has had to turn down placements because of the lower employment rate of $1.20 per hour.

The placement officer placed fourteen (14) cooperative office education students. This area provided the largest number of placements.

The placement officer met with students and discussed the following: (1) Ways of getting a job; (2) Applications of various forms; and, (3) Do's and Don'ts of interviewing for a job. For a copy of the Do's and Don'ts see Appendix D.

The Quarterly Reports reflect the many employers that were called on regarding the employment of secondary students. Forms were mailed to many more employers regarding their needs in terms of student services.

MIDDLE AND SECONDARY SCHOOL STATISTICAL RESULTS AND ACCOMPLISHMENTS

Two statistical techniques were used in an attempt to ascertain the communalities and/or differentia between a group of middle school students and two groups of secondary students for the purpose of enhancing the career education concept. One statistical technique was factor analysis, and the second statistical technique was the t-ratio.

Kuder Interest Survey results obtained from middle school students enrolled in grades six, seven, and eight were compared using the t-ratio to *Kuder Interest Survey* results obtained from a group of secondary students enrolled in a technical and industrial training curriculum (T & I) and a group of secondary students enrolled in an academic curriculum (AC). The results obtained from each grade level group of middle school students were first compared to the results of the T & I Group and later the same results were compared to the AC Group.

Iowa Tests of Basic Skills, *Iowa Tests of Educational Development*, *Kuder Interest Survey*, and *Primary Mental Abilities Tests* were used to obtain data from middle school and secondary school students. The data obtained from these measures were factorial analyzed in an attempt to ascertain the communalities and/or differentia that existed between a group of middle school students and two groups of secondary students.

t-ratio Of Interest Areas

The survey data obtained from sixth, seventh, and eighth grade students were compared to the survey results obtained from students enrolled in a technical and industrial training program (T & I) and students enrolled in an academic program. The t-ratio results computed from the interest survey are denoted in the following text.

Grade six compared to Secondary T & I. Seven of ten interest area comparisons provided t-ratio differences that were significant at or beyond the 0.05 level of confidence. The interest areas and t-ratio values were as follows: (1) Outdoor, 3.25**; (2) Mechanical, 3.78**; (3) Computational, 4.76**; (4) Scientific, 5.13**; (5) Persuasive, 0.24; (6) Artistic, 5.69**; (7) Literary, 0.02; (8) Musical, 2.20*; (9) Social Service, 0.98; and, (10) Clerical, 2.31*. (*denotes 0.05 level and ** denotes 0.01 level).

Data computed for the comparisons of the results acquired from grade six students and T & I students are presented in Tables LVII - LXVI. Viewed as a composite unit, these data appear to suggest that a statistically significant difference existed between a general population of sixth grade students and students enrolled in a T & I curriculum at the secondary level. Further analysis seems to suggest that the general population of sixth grade students contain a percentage of middle school students that will select a T & I program at the secondary level.

Grade six compared to Secondary Academic. Five of the ten interest area comparisons provided t-ratio differences that were significant at or beyond the 0.05 level of confidence. The interest areas and t-ratio values were as follows: (Outdoor, 1.57; (2) Mechanical, 0.55; (3) Computational, 2.57*; (4) Scientific, 2.75**; (5) Persuasive, 0.04; (6) Artistic, 2.61**; (7) Literary, 3.38**; (8) Musical, 2.94**; (9) Social Services; 0.52; and, (10) Clerical, 0.71. (*denotes 0.05 level and ** denotes 0.01 level).

The survey results of grade six students as compared to secondary students in an academic curriculum are presented in Tables LXVII - LXXVI. The results of comparing grade six students' interest and secondary students' interest patterns appear to indicate some of the students at grade six respond in a significantly different fashion on an interest survey than secondary students in an academic program. The mean values of these comparisons were utilized as points of departure in planning instructional activities.

Grade seven compared to Secondary T & I. Nine of ten interest area comparisons provided t-ratio differences that were statistically significant at or beyond the 0.05 level of confidence for grade seven students and secondary T & I students. The interest areas and t-ratio values were as follows: (1) Outdoor, 2.79**; (2) Mechanical, 8.47**; (3) Computational, 6.10**; (4) Scientific, 3.08**; (5) Persuasive, 3.39**; (6) Artistic, 3.24**; (7) Literary, 1.75; (8) Musical, 2.55*; (9) Social Service, 4.92**; and, (10) Clerical, 5.86**. (*denotes 0.05 level and ** denotes 0.01 level).

The Literary interest area is the only interest area wherein a significant difference did not appear for these groups. Conjecturing a hypothesis, it appears that seventh grade students differ significantly in interest patterns when compared to secondary T & I students. T & I students have higher mean scores on Outdoor, Mechanical, Computational, Persuasive, Literary, Musical, Social Service, and Clerical interest areas than a general population of seventh grade students. These data indicate that seventh grade students with high scores in the aforementioned areas may select a T & I program at the secondary level. This assertion is tentative in view of a need for continuing research. These data appear in Tables LXXVII - LXXXVI.

TABLE LVII

STUDENT TYPE, OUTDOOR KUDER INTEREST AREA, NUMBER OF STUDENTS, MEAN, STANDARD DEVIATION, MEAN DIFFERENCE, STANDARD ERROR OF THE DIFFERENCE IN MEANS AND t-ratio FOR STUDENTS ENROLLED IN SECONDARY T & I AND STUDENTS ENROLLED IN GRADE SIX

Student Type	Kuder Interest Area	N	df	Mean	Variance	SD	$M_1 - M_2$	σ_D	t-ratio
Secondary T & I		178	177	25.67	105.63	10.28			
	Outdoor						4.10	1.26	3.25**
Grade Six		36	35	21.57	36.50	6.04			

* 1.97 Significant at or beyond the .05 level of confidence

** 2.60 Significant at or beyond the .01 level of confidence

TABLE LVIII

STUDENT TYPE, MECHANICAL KUDER INTEREST AREA, NUMBER OF STUDENTS, MEAN, STANDARD DEVIATION, MEAN DIFFERENCE, STANDARD ERROR OF THE DIFFERENCE IN MEANS AND t-ratio FOR STUDENTS ENROLLED IN SECONDARY T & I AND STUDENTS ENROLLED IN GRADE SIX

Student Type	Kuder Interest Area	N	df	Mean	Variance	SD	$M_1 - M_2$	σ_D	t-ratio
Secondary T & I		178	177	46.44	170.75	13.07			
	Mechanical						10.44	2.76	3.78**
Grade Six		36	35	36.00	239.00	15.46			

* 1.97 Significant at or beyond the .05 level of confidence

** 2.60 Significant at or beyond the .01 level of confidence

TABLE LIX

STUDENT TYPE, COMPUTATIONAL KUDER INTEREST AREA, NUMBER OF STUDENTS, MEAN, STANDARD DEVIATION, MEAN DIFFERENCE, STANDARD ERROR OF THE DIFFERENCE IN MEANS AND t-ratio FOR STUDENTS ENROLLED IN SECONDARY T & I AND STUDENTS ENROLLED IN GRADE SIX

Student Type	Kuder Interest Area	N	df	Mean	Variance	SD	M_1-M_2	σ_{D}	t-ratio
Secondary T & I		178	177	35.33	89.63	9.47			
	Computational						5.76	1.21	4.76**
Grade Six		36	35	29.57	34.83	5.90			

* 1.97 Significant at or beyond the .05 level of confidence

** 2.60 Significant at or beyond the .01 level of confidence

TABLE LX

STUDENT TYPE, SCIENTIFIC KUDER INTEREST AREA, NUMBER OF STUDENTS, MEAN, STANDARD DEVIATION, MEAN DIFFERENCE, STANDARD ERROR OF THE DIFFERENCE IN MEANS AND t-ratio FOR STUDENTS ENROLLED IN SECONDARY T & I AND STUDENTS ENROLLED IN GRADE SIX

Student Type	Kuder Interest Area	N	df	Mean	Variance	SD	$M_1 - M_2$	σ_D	t-ratio
Secondary T & I		178	177	28.78	67.75	8.23			
	Scientific						9.08	1.77	5.13**
Grade Six		36	35	37.86	98.83	9.94			

* 1.97 Significant at or beyond the .05 level of confidence

** 2.60 Significant at or beyond the .01 level of confidence

TABLE LXI

STUDENT TYPE, PERSUASIVE KUDER INTEREST AREA, NUMBER OF STUDENTS, MEAN, STANDARD DEVIATION, MEAN DIFFERENCE, STANDARD ERROR OF THE DIFFERENCE IN MEANS AND t-ratio FOR STUDENTS ENROLLED IN SECONDARY T & I AND STUDENTS ENROLLED IN GRADE SIX

Student Type	Kuder Interest Area	N	df	Mean	Variance	SD	$M_1 - M_2$	$\sigma_{\bar{D}}$	t-ratio
Secondary T & I		178	177	54.67	403.38	20.08			
	Persuasive						0.53	2.17	0.24
Grade Six		36	35	54.14	87.17	9.34			

* 1.97 Significant at or beyond the .05 level of confidence

** 2.60 Significant at or beyond the .01 level of confidence

TABLE LXII

STUDENT TYPE, ARTISTIC KUDER INTEREST AREA, NUMBER OF STUDENTS, MEAN, STANDARD DEVIATION, ~~MEAN DIFFERENCE~~, STANDARD ERROR OF THE DIFFERENCE IN MEANS AND t-ratio FOR STUDENTS ENROLLED IN SECONDARY T & I AND STUDENTS ENROLLED IN GRADE SIX

Student Type	Kuder Interest Area	N	df	Mean	Variance	SD	$M_1 - M_2$	σ_D	t-ratio
Secondary T & I	Artistic	178	177	29.78	84.00	9.17	8.36	1.47	5.69**
Grade Six		36	35	38.14	60.83	7.80			

* 1.97 Significant at or beyond the .05 level of confidence

** 2.60 Significant at or beyond the .01 level of confidence

TABLE LXIII

STUDENT TYPE, LITERARY KUDER INTEREST AREA, NUMBER OF STUDENTS, MEAN, STANDARD DEVIATION, ~~MEAN DIFFERENCE~~, STANDARD ERROR OF THE DIFFERENCE IN MEANS AND t-ratio FOR STUDENTS ENROLLED IN SECONDARY T & I AND STUDENTS ENROLLED IN GRADE SIX

Student Type	Kuder Interest Area	N	df	Mean	Variance	SD	M_1-M_2	σ_D	t-ratio
Secondary T & I		178	177	31.89	111.75	10.57			
	Literary						0.03	1.60	0.02
Grade Six		36	35	31.86	69.17	8.32			

* 1.97 Significant at or beyond the .05 level of confidence

** 2.60 Significant at or beyond the .01 level of confidence

TABLE LXIV

STUDENT TYPE, MUSICAL KUDER INTEREST AREA, NUMBER OF STUDENTS, MEAN, STANDARD DEVIATION, MEAN DIFFERENCE, STANDARD ERROR OF THE DIFFERENCE IN MEANS AND t-ratio FOR STUDENTS ENROLLED IN SECONDARY T & I AND STUDENTS ENROLLED IN GRADE SIX

Student Type	Kuder Interest Area	N	df	Mean	Variance	SD	$M_1 - M_2$	σ_D	t-ratio
Secondary T & I		178	177	15.11	67.88	8.24			
	Musical						2.82	1.28	2.20*
Grade Six		36	35	12.29	45.00	6.71			

* 1.97 Significant at or beyond the .05 level of confidence

** 2.60 Significant at or beyond the .01 level of confidence

TABLE LXV

STUDENT TYPE, SOCIAL SERVICE KUDER INTEREST AREA, NUMBER OF STUDENTS, MEAN, STANDARD DEVIATION, MEAN DIFFERENCE, STANDARD ERROR OF THE DIFFERENCE IN MEANS AND t-ratio FOR STUDENTS ENROLLED IN SECONDARY T & I AND STUDENTS ENROLLED IN GRADE SIX

Student Type	Kuder Interest Area	N	df	Mean	Variance	SD	M_1-M_2	σ_D	t-ratio
Secondary T & I		178	177	47.22	193.75	13.92			
	Social Service						2.64	2.69	0.98
Grade Six		36	35	49.86	221.17	14.87			

* 1.97 Significant at or beyond the .05 level of confidence

** 2.60 Significant at or beyond the .01 level of confidence

TABLE LXVI

STUDENT TYPE, CLERICAL KUDER INTEREST AREA, NUMBER OF STUDENTS, MEAN, STANDARD DEVIATION, MEAN DIFFERENCE, STANDARD ERROR OF THE DIFFERENCE IN MEANS AND t-ratio FOR STUDENTS ENROLLED IN SECONDARY T & I AND STUDENTS ENROLLED IN GRADE SIX

Student Type	Kuder Interest Area	N	df	Mean	Variance	SD	M_1-M_2	σ_D	t-ratio
Secondary T & I		178	177	62.33	153.88	12.40			
	Clerical						6.04	2.61	2.31*
Grade Six		36	35	56.29	213.33	14.61			

* 1.97 Significant at or beyond the .05 level of confidence

** 2.60 Significant at or beyond the .01 level of confidence

TABLE LXVII

STUDENT TYPE, OUTDOOR KUDER INTEREST AREA, NUMBER OF STUDENTS, MEAN, STANDARD DEVIATION, MEAN DIFFERENCE, STANDARD ERROR OF THE DIFFERENCE IN MEANS AND t-ratio FOR STUDENTS ENROLLED IN SECONDARY ACADEMIC AND STUDENTS ENROLLED IN GRADE SIX

Student Type	Kuder Interest Area	N	df	Mean	Variance	SD	M_1-M_2	σ_D	t-ratio
Secondary Academic		100	99	23.44	40.00	6.33			
	Outdoor						1.87	1.19	1.57
Grade Six		36	35	21.57	36.50	6.04			

* 1.98 Significant at or beyond the .05 level of confidence

** 2.61 Significant at or beyond the .01 level of confidence

TABLE LXVIII

STUDENT TYPE, MECHANICAL KUDER INTEREST AREA, NUMBER OF STUDENTS, MEAN, STANDARD DEVIATION, MEAN DIFFERENCE, STANDARD ERROR OF THE DIFFERENCE IN MEANS AND t-ratio FOR STUDENTS ENROLLED IN SECONDARY ACADEMIC AND STUDENTS ENROLLED IN GRADE SIX

Student Type	Kuder Interest Area	N	df	Mean	Variance	SD	M_1-M_2	σ_D	t-ratio
Secondary Academic		100	99	34.33	264.37	16.26			
	Mechanical						1.67	3.05	0.55
Grade Six		36	35	36.00	239.00	15.46			

* 1.98 Significant at or beyond the .05 level of confidence

** 2.61 Significant at or beyond the .01 level of confidence

TABLE LXIX

STUDENT TYPE, COMPUTATIONAL KUDER INTEREST AREA, NUMBER OF STUDENTS, MEAN, STANDARD DEVIATION, MEAN DIFFERENCE, STANDARD ERROR OF THE DIFFERENCE IN MEANS AND t-ratio FOR STUDENTS ENROLLED IN SECONDARY ACADEMIC AND STUDENTS ENROLLED IN GRADE SIX

Student Type	Kuder Interest Area	N	df	Mean	Variance	SD	$M_1 - M_2$	σ_D	t-ratio
Secondary Academic		100	99	25.89	107.13	10.35			
	Computational						3.68	1.43	2.57*
Grade Six		36	35	29.57	34.83	5.90			

* 1.98 Significant at or beyond the .05 level of confidence

** 2.61 Significant at or beyond the .01 level of confidence

TABLE LXX

STUDENT TYPE, SCIENTIFIC · KUDER INTEREST AREA, NUMBER OF STUDENTS, MEAN, STANDARD DEVIATION, MEAN DIFFERENCE, STANDARD ERROR OF THE DIFFERENCE IN MEANS AND t-ratio FOR STUDENTS ENROLLED IN SECONDARY ACADEMIC AND STUDENTS ENROLLED IN GRADE SIX

Student Type	Kuder Interest Area	N	df	Mean	Variance	SD	M_1-M_2	σ_D	t-ratio
Secondary Academic		100	99	31.78	215.00	14.67			
	Scientific						6.08	2.21	2.75**
Grade Six		36	35	37.86	98.83	9.94			

* 1.98 Significant at or beyond the .05 level of confidence

** 2.61 Significant at or beyond the .01 level of confidence

TABLE LXXI

STUDENT TYPE, PERSUASIVE KUDER INTEREST AREA, NUMBER OF STUDENTS, MEAN, STANDARD DEVIATION, MEAN DIFFERENCE, STANDARD ERROR OF THE DIFFERENCE IN MEANS AND t-ratio FOR STUDENTS ENROLLED IN SECONDARY ACADEMIC AND STUDENTS ENROLLED IN GRADE SIX

Student Type	Kuder Interest Area	N	df	Mean	Variance	SD	M_1-M_2	σ_D	t-ratio
Secondary Academic		100	99	54.22	81.50	9.03			
	Persuasive						0.08	1.80	0.04
Grade Six		36	35	54.14	87.17	9.34			

* 1.98 Significant at or beyond the .05 level of confidence

** 2.61 Significant at or beyond the .01 level of confidence

TABLE LXXII

STUDENT TYPE, ARTISTIC KUDER INTEREST AREA, NUMBER OF STUDENTS, MEAN, STANDARD DEVIATION, MEAN DIFFERENCE, STANDARD ERROR OF THE DIFFERENCE IN MEANS AND t-ratio FOR STUDENTS ENROLLED IN SECONDARY ACADEMIC AND STUDENTS ENROLLED IN GRADE SIX

Student Type	Kuder Interest Area	N	df	Mean	Variance	SD	M_1-M_2	σ_D	t-ratio
Secondary Academic		100	99	33.67	126.13	11.23			
	Artistic						4.47	1.71	2.61**
Grade Six		36	35	38.14	60.83	7.80			

* 1.98 Significant at or beyond the .05 level of confidence

** 2.61 Significant at or beyond the .01 level of confidence

TABLE LXXIII

STUDENT TYPE, LITERARY KUDER INTEREST AREA, NUMBER OF STUDENTS, MEAN, STANDARD DEVIATION, MEAN DIFFERENCE, STANDARD ERROR OF THE DIFFERENCE IN MEANS AND t-ratio FOR STUDENTS ENROLLED IN SECONDARY ACADEMIC AND STUDENTS ENROLLED IN GRADE SIX

Student Type	Kuder Interest Area	N	df	Mean	Variance	SD	$M_1 - M_2$	σ_D	t-ratio
Secondary Academic	Literary	100	99	37.67	103.38	10.17	5.81	1.72	3.38**
Grade Six		36	35	31.86	69.17	8.32			

* 1.98 Significant at or beyond the .05 level of confidence

** 2.61 Significant at or beyond the .01 level of confidence

TABLE LXXIV

STUDENT TYPE, MUSICAL KUDER INTEREST AREA, NUMBER OF STUDENTS, MEAN, STANDARD DEVIATION, MEAN DIFFERENCE, STANDARD ERROR OF THE DIFFERENCE IN MEANS AND t-ratio FOR STUDENTS ENROLLED IN SECONDARY ACADEMIC AND STUDENTS ENROLLED IN GRADE SIX

Student Type	Kuder Interest Area	N	df	Mean	Variance	SD	M_1-M_2	σ_D	t-ratio
Secondary Academic		100	99	8.56	35.50	5.96			
	Musical						3.73	1.27	2.94**
Grade Six		36	35	12.29	45.00	6.71			

* 1.98 Significant at or beyond the .05 level of confidence

** 2.61 Significant at or beyond the .01 level of confidence

TABLE LXXV

STUDENT TYPE, SOCIAL SERVICE KUDER INTEREST AREA, NUMBER OF STUDENTS, MEAN, STANDARD DEVIATION, MEAN DIFFERENCE, STANDARD ERROR OF THE DIFFERENCE IN MEANS AND t-ratio FOR STUDENTS ENROLLED IN SECONDARY ACADEMIC AND STUDENTS ENROLLED IN GRADE SIX

Student Type	Kuder Interest Area	N	df	Mean	Variance	SD	M_1-M_2	σ_D	t-ratio
Secondary Academic		100	99	48.33	264.88	16.27			
	Social Service						1.53	2.96	0.52
Grade Six		36	35	49.86	221.17	14.87			

* 1.98 Significant at or beyond the .05 level of confidence

** 2.61 Significant at or beyond the .01 level of confidence

TABLE LXXVI

STUDENT TYPE, CLERICAL KUDER INTEREST AREA, NUMBER OF STUDENTS, MEAN, STANDARD DEVIATION, MEAN DIFFERENCE, STANDARD ERROR OF THE DIFFERENCE IN MEANS AND t-ratio FOR STUDENTS ENROLLED IN SECONDARY ACADEMIC AND STUDENTS ENROLLED IN GRADE SIX

Student Type	Kuder Interest Area	N	df	Mean	Variance	SD	M_1-M_2	σ_D	t-ratio
Secondary Academic		100	99	58.33	232.63	15.25			
	Clerical						2.04	2.87	0.71
Grade Six		36	35	56.29	213.33	14.61			

* 1.98 Significant at or beyond the .05 level of confidence

** 2.61 Significant at or beyond the .01 level of confidence

TABLE LXXVII

STUDENT TYPE, OUTDOOR KUDER INTEREST AREA, NUMBER OF STUDENTS, MEAN, STANDARD DEVIATION, MEAN DIFFERENCE, STANDARD ERROR OF THE DIFFERENCE IN MEANS AND t-ratio FOR STUDENTS ENROLLED IN SECONDARY T & I AND STUDENTS ENROLLED IN GRADE SEVEN

Student Type	Kuder Interest Area	N	df	Mean	Variance	SD	$M_1 - M_2$	σ_D	t-ratio
Secondary T & I		178	177	25.67	105.63	10.28			
	Outdoor						3.54	1.27	2.79**
Grade Seven		85	84	22.13	86.43	9.30			

* 1.97 Significant at or beyond the .05 level of confidence

** 2.61 Significant at or beyond the .01 level of confidence

TABLE LXXVIII

STUDENT TYPE, MECHANICAL KUDER INTEREST AREA, NUMBER OF STUDENTS, MEAN, STANDARD DEVIATION, MEAN DIFFERENCE, STANDARD ERROR OF THE DIFFERENCE IN MEANS AND t-ratio FOR STUDENTS ENROLLED IN SECONDARY T & I AND STUDENTS ENROLLED IN GRADE SEVEN

Student Type	Kuder Interest Area	N	df	Mean	Variance	SD	M_1-M_2	σ_D	t-ratio
Secondary T & I		178	177	46.44	170.75	13.07			
	Mechanical						12.19	1.44	8.47**
Grade Seven		85	84	34.25	95.43	9.77			

* 1.97 Significant at or beyond the .05 level of confidence

** 2.61 Significant at or beyond the .01 level of confidence

TABLE LXXIX

STUDENT TYPE, COMPUTATIONAL KUDER INTEREST AREA, NUMBER OF STUDENTS, MEAN, STANDARD DEVIATION, MEAN DIFFERENCE, STANDARD ERROR OF THE DIFFERENCE IN MEANS AND t-ratio FOR STUDENTS ENROLLED IN SECONDARY T & I AND STUDENTS ENROLLED IN GRADE SEVEN

Student Type	Kuder Interest Area	N	df	Mean	Variance	SD	M_1-M_2	σ_D	t-ratio
Secondary T & I		178	177	35.33	89.63	9.47			
	Computational						7.20	1.18	6.10**
Grade Seven		85	84	28.13	75.86	8.71			

* 1.97 Significant at or beyond the .05 level of confidence

** 2.61 Significant at or beyond the .01 level of confidence

TABLE LXXX

STUDENT TYPE, SCIENTIFIC KUDER INTEREST AREA, NUMBER OF STUDENTS, MEAN, STANDARD DEVIATION, MEAN DIFFERENCE, STANDARD ERROR OF THE DIFFERENCE IN MEANS AND t-ratio FOR STUDENTS ENROLLED IN SECONDARY T & I AND STUDENTS ENROLLED IN GRADE SEVEN

Student Type	Kuder Interest Area	N	df	Mean	Variance	SD	$M_1 - M_2$	σ_D	t-ratio
Secondary T & I		178	177	28.78	67.75	8.23			
	Scientific						4.47	1.45	3.08**
Grade Seven		85	84	33.25	146.29	12.10			

* 1.97 Significant at or beyond the .05 level of confidence

** 2.61 Significant at or beyond the .01 level of confidence

TABLE LXXXI

STUDENT TYPE, PERSUASIVE KUDER INTEREST AREA, NUMBER OF STUDENTS, MEAN, STANDARD DEVIATION, MEAN DIFFERENCE, STANDARD ERROR OF THE DIFFERENCE IN MEANS AND t-ratio FOR STUDENTS ENROLLED IN SECONDARY T & I AND STUDENTS ENROLLED IN GRADE SEVEN

Student Type	Kuder Interest Area	N	df	Mean	Variance	SD	M_1-M_2	σ_D	t-ratio
Secondary T & I		178	177	54.67	403.38	20.08			
	Persuasive						6.92	2.04	3.39**
Grade Seven		85	84	47.75	161.43	12.71			

* 1.97 Significant at or beyond the .05 level of confidence

** 2.61 Significant at or beyond the .01 level of confidence

TABLE LXXXII

STUDENT TYPE, ARTISTIC KUDER INTEREST AREA, NUMBER OF STUDENTS, MEAN, STANDARD DEVIATION, MEAN DIFFERENCE, STANDARD ERROR OF THE DIFFERENCE IN MEANS AND t-ratio FOR STUDENTS ENROLLED IN SECONDARY T & I AND STUDENTS ENROLLED IN GRADE SEVEN

Student Type	Kuder Interest Area	N	df	Mean	Variance	SD	M_1-M_2	σ_D	t-ratio
Secondary T & I		178	177	29.78	84.00	9.17			
	Artistic						3.72	1.15	3.24**
Grade Seven		85	84	33.50	72.29	8.50			

* 1.97 Significant at or beyond the .05 level of confidence

** 2.61 Significant at or beyond the .01 level of confidence

TABLE LXXXIII

STUDENT TYPE, LITERARY KUDER INTEREST AREA, NUMBER OF STUDENTS, MEAN, STANDARD DEVIATION, MEAN DIFFERENCE, STANDARD ERROR OF THE DIFFERENCE IN MEANS AND t-ratio FOR STUDENTS ENROLLED IN SECONDARY T & I AND STUDENTS ENROLLED IN GRADE SEVEN

Student Type	Kuder Interest Area	N	df	Mean	Variance	SD	$M_1 - M_2$	σ_D	t-ratio
Secondary T & I		178	177	31.89	111.75	10.57			
	Literary						2.14	1.22	1.75
Grade Seven		85	84	29.75	74.00	8.60			

* 1.97 Significant at or beyond the .05 level of confidence

** 2.61 Significant at or beyond the .01 level of confidence

TABLE LXXXIV

STUDENT TYPE, MUSICAL KUDER INTEREST AREA, NUMBER OF STUDENTS, MEAN, STANDARD DEVIATION, MEAN DIFFERENCE, STANDARD ERROR OF THE DIFFERENCE IN MEANS AND t-ratio FOR STUDENTS ENROLLED IN SECONDARY T & I AND STUDENTS ENROLLED IN GRADE SEVEN

Student Type	Kuder Interest Area	N	df	Mean	Variance	SD	$M_1 - M_2$	σ_D	t-ratio
Secondary T & I		178	177	15.11	67.88	8.24			
	Musical						2.73	1.07	2.55*
Grade Seven		85	84	12.38	64.14	8.01			

* 1.97 Significant at or beyond the .05 level of confidence

** 2.61 Significant at or beyond the .01 level of confidence

TABLE LXXXV

STUDENT TYPE, SOCIAL SERVICE KUDER INTEREST AREA, NUMBER OF STUDENTS, MEAN, STANDARD DEVIATION, MEAN DIFFERENCE, STANDARD ERROR OF THE DIFFERENCE IN MEANS AND t-ratio FOR STUDENTS ENROLLED IN SECONDARY T & I AND STUDENTS ENROLLED IN GRADE SEVEN

Student Type	Kuder Interest Area	N	df	Mean	Variance	SD	M_1-M_2	σ_D	t-ratio
Secondary T & I		178	177	47.22	193.75	13.92			
	Social Service						11.22	2.28	4.92**
Grade Seven		85	84	36.00	348.00	18.66			

* 1.97 Significant at or beyond the .05 level of confidence

** 2.61 Significant at or beyond the .01 level of confidence

TABLE LXXXVI

STUDENT TYPE, CLERICAL KUDER INTEREST AREA, NUMBER OF STUDENTS, MEAN, STANDARD DEVIATION, MEAN DIFFERENCE, STANDARD ERROR OF THE DIFFERENCE IN MEANS AND t-ratio FOR STUDENTS ENROLLED IN SECONDARY T & I AND STUDENTS ENROLLED IN GRADE SEVEN

Student Type	Kuder Interest Area	N	df	Mean	Variance	SD	$M_1 - M_2$	σ_D	t-ratio
Secondary T & I		178	177	62.33	153.88	12.40			
	Clerical						11.08	1.89	5.86**
Grade Seven		85	84	51.25	230.29	15.18			

* 1.97 Significant at or beyond the .05 level of confidence

** 2.61 Significant at or beyond the .01 level of confidence

Grade seven compared to Secondary Academic. Five of ten interest area comparisons provided t-ratio differences that were statistically significant at or beyond the 0.05 level of confidence for grade seven students and secondary academic students. The interest areas and t-ratio values were as follows: (1) Outdoor, 1.14; (2) Mechanical, 0.04; (3) Computational, 1.60; (4) Scientific, 0.75; (5) Persuasive, 3.92**; (6) Artistic, 0.12; (7) Literary, 5.74**; (8) Musical, 3.60**; (9) Social Service, 4.74**, and, (10) Clerical, 3.15**. (*denotes 0.05 level and ** denotes 0.01 level).

Grade seven students do not appear to differ significantly from secondary students enrolled in an academic curriculum to the extent displayed by secondary students enrolled in a T & I curriculum. This fact is indicated by the low t-ratio values for the Outdoor, Mechanical, Computational, Scientific, and Artistic interest areas. In three of these areas the mean values of the seventh grade students were larger than the secondary students in an academic curriculum. These data are presented in Tables LXXXVII - XCVI.

Grade eight compared to Secondary T & I. Six of ten interest area comparisons provided t-ratio differences that were statistically significant at or beyond the 0.05 level of confidence for grade eight students and secondary T & I students. The interest areas and t-ratio values were as follows: (1) Outdoor, 2.10*; (2) Mechanical, 6.54**; (3) Computational, 8.62**; (4) Scientific, 1.96; (5) Persuasive, 1.41; (6) Artistic, 4.06**; (7) Literary, 1.06; (8) Musical, 3.11**; (9) Social Service, 1.00; and, (10) Clerical, 2.52*. (*denotes 0.05 level and ** denotes 0.01 level).

In each interest area where a significant difference was found to exist, the mean value of the interest area was larger for students enrolled in the secondary T & I curriculum. One exception was noted for this observation in the Artistic interest area. For the areas that did not produce a significant difference at the 0.05 level of confidence, the mean values were larger for grade eight students except on the Literary scale. Tables XCVII - CVI contain these data.

Grade eight compared to Secondary Academic. Three of ten interest area comparisons provided t-ratio differences that were statistically significant at or beyond the 0.05 level of confidence for grade eight students and secondary students enrolled in an academic curriculum. The interest areas and t-ratio values for these groups are as follows: (1) Outdoor, 0.22; (2) Mechanical, 0.31; (3) Computational, 0.46; (4) Scientific, 0.29; (5) Persuasive, 2.12*; (6) Artistic, 0.16; (7) Literary, 4.67**; (8) Musical, 5.59**; (9) Social Service, 0.45; and, (10) Clerical, 0.23. (*denotes 0.05 level and ** denotes 0.01 level).

TABLE LXXXVII

STUDENT TYPE, OUTDOOR KUDER INTEREST AREA, NUMBER OF STUDENTS, MEAN, STANDARD DEVIATION, MEAN DIFFERENCE, STANDARD ERROR OF THE DIFFERENCE IN MEANS AND t-ratio FOR STUDENTS ENROLLED IN SECONDARY ACADEMIC AND STUDENTS ENROLLED IN GRADE SEVEN

Student Type	Kuder Interest Area	N	df	Mean	Variance	SD	$M_1 - M_2$	σ_D	t-ratio
Secondary Academic		100	99	22.13	86.43	9.30			
	Outdoor						1.31	1.15	1.14
Grade Seven		85	84	23.44	40.00	6.33			

* 1.97 Significant at or beyond the .05 level of confidence

** 2.60 Significant at or beyond the .01 level of confidence

TABLE LXXXVIII

STUDENT TYPE, MECHANICAL KUDER INTEREST AREA, NUMBER OF STUDENTS, MEAN, STANDARD DEVIATION, MEAN DIFFERENCE, STANDARD ERROR OF THE DIFFERENCE IN MEANS AND t-ratio FOR STUDENTS ENROLLED IN SECONDARY ACADEMIC AND STUDENTS ENROLLED IN GRADE SEVEN

Student Type	Kuder Interest Area	N	df	Mean	Variance	SD	M_1-M_2	σ_D	t-ratio
Secondary Academic		100	99	34.33	264.37	16.26			
	Mechanical						0.08	1.94	0.04
Grade Seven		85	84	34.25	95.43	9.77			

* 1.97 Significant at or beyond the .05 level of confidence

** 2.60 Significant at or beyond the .01 level of confidence

TABLE LXXXIX

STUDENT TYPE, COMPUTATIONAL KUDER INTEREST AREA, NUMBER OF STUDENTS, MEAN, STANDARD DEVIATION, MEAN DIFFERENCE, STANDARD ERROR OF THE DIFFERENCE IN MEANS AND t-ratio FOR STUDENTS ENROLLED IN SECONDARY ACADEMIC AND STUDENTS ENROLLED IN GRADE SEVEN

Student Type	Kuder Interest Area	N	df	Mean	Variance	SD	M_1-M_2	σ_D	t-ratio
Secondary Academic		100	99	25.89	107.13	10.35			
	Computational						2.24	1.40	1.60
Grade Seven		85	84	28.13	75.86	8.71			

* 1.97 Significant at or beyond the .05 level of confidence

** 2.60 Significant at or beyond the .01 level of confidence

TABLE XC

STUDENT TYPE, SCIENTIFIC KUDER INTEREST AREA, NUMBER OF STUDENTS, MEAN, STANDARD DEVIATION, MEAN DIFFERENCE, STANDARD ERROR OF THE DIFFERENCE IN MEANS AND t-ratio FOR STUDENTS ENROLLED IN SECONDARY ACADEMIC AND STUDENTS ENROLLED IN GRADE SEVEN

Student Type	Kuder Interest Area	N	df	Mean	Variance	SD	$M_1 - M_2$	σ_D	t-ratio
Secondary Academic		100	99	31.78	215.00	14.67			
	Scientific						1.47	1.97	0.75
Grade Seven		85	84	33.25	146.29	12.10			

* 1.97 Significant at or beyond the .05 level of confidence

** 2.60 Significant at or beyond the .01 level of confidence

TABLE XCI

STUDENT TYPE, PERSUASIVE KUDER INTEREST AREA, NUMBER OF STUDENTS, MEAN, STANDARD DEVIATION, MEAN DIFFERENCE, STANDARD ERROR OF THE DIFFERENCE IN MEANS AND t-ratio FOR STUDENTS ENROLLED IN SECONDARY ACADEMIC AND STUDENTS ENROLLED IN GRADE SEVEN

Student Type	Kuder Interest Area	N	df	Mean	Variance	SD	M_1-M_2	σ_D	t-ratio
Secondary Academic		100	99	54.22	81.50	9.03			
	Persuasive						6.47	1.65	3.92*
Grade Seven		85	84	47.75	161.43	12.71			

* 1.97 Significant at or beyond the .05 level of confidence

** 2.60 Significant at or beyond the .01 level of confidence

TABLE XCII

STUDENT TYPE, ARTISTIC KUDER INTEREST AREA, NUMBER OF STUDENTS, MEAN, STANDARD DEVIATION, MEAN DIFFERENCE, STANDARD ERROR OF THE DIFFERENCE IN MEANS AND t-ratio FOR STUDENTS ENROLLED IN SECONDARY ACADEMIC AND STUDENTS ENROLLED IN GRADE SEVEN

Student Type	Kuder Interest Area	N	df	Mean	Variance	SD	$M_1 - M_2$	σ_D	t-ratio
Secondary Academic		100	99	33.67	126.13	11.23			
	Artistic						0.17	1.45	0.12
Grade Seven		85	84	33.50	72.29	8.50			

* 1.97 Significant at or beyond the .05 level of confidence

** 2.60 Significant at or beyond the .01 level of confidence

TABLE XCIII

STUDENT TYPE, LITERARY KUDER INTEREST AREA, NUMBER OF STUDENTS, MEAN, STANDARD DEVIATION, MEAN DIFFERENCE, STANDARD ERROR OF THE DIFFERENCE IN MEANS AND t-ratio FOR STUDENTS ENROLLED IN SECONDARY ACADEMIC AND STUDENTS ENROLLED IN GRADE SEVEN

Student Type	Kuder Interest Area	N	df	Mean	Variance	SD	M_1-M_2	σ_D	t-ratio
Secondary Academic		100	99	37.67	103.38	10.17			
	Literary						7.92	1.38	5.74**
Grade Seven		85	84	29.75	74.00	8.60			

* 1.97 Significant at or beyond the .05 level of confidence

** 2.60 Significant at or beyond the .01 level of confidence

TABLE XCIV

STUDENT TYPE, MUSICAL KUDER INTEREST AREA, NUMBER OF STUDENTS, MEAN, STANDARD DEVIATION, MEAN DIFFERENCE, STANDARD ERROR OF THE DIFFERENCE IN MEANS AND t-ratio FOR STUDENTS ENROLLED IN SECONDARY ACADEMIC AND STUDENTS ENROLLED IN GRADE SEVEN

Student Type	Kuder Interest Area	N	df	Mean	Variance	SD	$M_1 - M_2$	σ_D	t-ratio
Secondary Academic		100	99	8.56	35.50	5.96			
	Musical						3.82	1.06	3.60**
Grade Seven		85	84	12.38	64.14	8.01			

* 1.97 Significant at or beyond the .05 level of confidence

** 2.60 Significant at or beyond the .01 level of confidence

TABLE XCV

STUDENT TYPE, SOCIAL SERVICE KUDER INTEREST AREA, NUMBER OF STUDENTS, MEAN, STANDARD DEVIATION, MEAN DIFFERENCE, STANDARD ERROR OF THE DIFFERENCE IN MEANS AND t-ratio FOR STUDENTS ENROLLED IN SECONDARY ACADEMIC AND STUDENTS ENROLLED IN GRADE SEVEN

Student Type	Kuder Interest Area	N	df	Mean	Variance	SD	$M_1 - M_2$	σ_D	t-ratio
Secondary Academic		100	99	48.33	264.88	16.27			
	Social Service						12.33	2.60	4.74**
Grade Seven		85	84	36.00	348.00	18.66			

* 1.97 Significant at or beyond the .05 level of confidence

** 2.60 Significant at or beyond the .01 level of confidence

TABLE XCVI

STUDENT TYPE, CLERICAL KUDER INTEREST AREA, NUMBER OF STUDENTS, MEAN, STANDARD DEVIATION, MEAN DIFFERENCE, STANDARD ERROR OF THE DIFFERENCE IN MEANS AND t-ratio FOR STUDENTS ENROLLED IN SECONDARY ACADEMIC AND STUDENTS ENROLLED IN GRADE SEVEN

Student Type	Kuder Interest Area	N	df	Mean	Variance	SD	$M_1 - M_2$	σ_D	t-ratio
Secondary Academic		100	99	58.33	232.63	15.25			
	Clerical						7.08	2.25	3.15**
Grade Seven		85	84	51.25	230.29	15.18			

* 1.97 Significant at or beyond the .05 level of confidence

** 2.60 Significant at or beyond the .01 level of confidence

TABLE XCVII

STUDENT TYPE, OUTDOOR KUDER INTEREST AREA, NUMBER OF STUDENTS, MEAN, STANDARD DEVIATION, MEAN DIFFERENCE, STANDARD ERROR OF THE DIFFERENCE IN MEANS AND t-ratio FOR STUDENTS ENROLLED IN SECONDARY T & I AND STUDENTS ENROLLED IN GRADE EIGHT

Student Type	Kuder Interest Area	N	df	Mean	Variance	SD	$M_1 - M_2$	σ_D	t-ratio
Secondary T & I		178	177	25.67	105.63	10.28			
	Outdoor						2.04	.97	2.10*
Grade Eight		75	74	23.63	26.43	5.14			

* 1.97 Significant at or beyond the .05 level of confidence

** 2.59 Significant at or beyond the .01 level of confidence

TABLE XCVIII

STUDENT TYPE, MECHANICAL KUDER INTEREST AREA, NUMBER OF STUDENTS, MEAN, STANDARD DEVIATION, MEAN DIFFERENCE, STANDARD ERROR OF THE DIFFERENCE IN MEANS AND t-ratio FOR STUDENTS ENROLLED IN SECONDARY T & I AND STUDENTS ENROLLED IN GRADE EIGHT

Student Type	Kuder Interest Area	N	df	Mean	Variance	SD	$M_1 - M_2$	σ_D	t-ratio
Secondary T & I		178	177	46.44	170.75	13.07			
	Mechanical						11.44	1.75	6.54**
Grade Eight		75	74	35.00	158.00	12.57			

* 1.97 Significant at or beyond the .05 level of confidence

** 2.59 Significant at or beyond the .01 level of confidence

TABLE XCIX

STUDENT TYPE, COMPUTATIONAL KUDER INTEREST AREA, NUMBER OF STUDENTS, MEAN, STANDARD DEVIATION, MEAN DIFFERENCE, STANDARD ERROR OF THE DIFFERENCE IN MEANS AND t-ratio FOR STUDENTS ENROLLED IN SECONDARY T & I AND STUDENTS ENROLLED IN GRADE EIGHT

Student Type	Kuder Interest Area	N	df	Mean	Variance	SD	M_1-M_2	σ_D	t-ratio
Secondary T & I		178	177	35.33	89.63	9.47			
	Computational						10.08	1.17	8.62**
Grade Eight		75	74	25.25	66.43	8.15			

* 1.97 Significant at or beyond the .05 level of confidence

** 2.59 Significant at or beyond the .01 level of confidence

TABLE C

STUDENT TYPE, SCIENTIFIC KUDER INTEREST AREA, NUMBER OF STUDENTS, MEAN, STANDARD DEVIATION, MEAN DIFFERENCE, STANDARD ERROR OF THE DIFFERENCE IN MEANS AND t-ratio FOR STUDENTS ENROLLED IN SECONDARY T & I AND STUDENTS ENROLLED IN GRADE EIGHT

Student Type	Kuder Interest Area	N	df	Mean	Variance	SD	M_1-M_2	$\sigma_{\bar{D}}$	t-ratio
Secondary T & I		178	177	28.78	67.75	8.23			
	Scientific						2.47	1.26	1.96
Grade Eight		75	74	31.25	89.71	9.47			

* 1.97 Significant at or beyond the .05 level of confidence

** 2.59 Significant at or beyond the .01 level of confidence

TABLE CI

STUDENT TYPE, PERSUASIVE KUDER INTEREST AREA, NUMBER OF STUDENTS, MEAN, STANDARD DEVIATION, MEAN DIFFERENCE, STANDARD ERROR OF THE DIFFERENCE IN MEANS AND t-ratio FOR STUDENTS ENROLLED IN SECONDARY T & I AND STUDENTS ENROLLED IN GRADE EIGHT

Student Type	Kuder Interest Area	N	df	Mean	Variance	SD	$M_1 - M_2$	σ_D	t-ratio
Secondary T & I		178	177	54.67	403.38	20.08			
	Persuasive						2.71	1.92	1.41
Grade Eight		75	74	57.38	106.43	10.32			

* 1.97 Significant at or beyond the .05 level of confidence

** 2.59 Significant at or beyond the .01 level of confidence

TABLE CII

STUDENT TYPE, ARTISTIC KUDER INTEREST AREA, NUMBER OF STUDENTS, MEAN, STANDARD DEVIATION, MEAN DIFFERENCE, STANDARD ERROR OF THE DIFFERENCE IN MEANS AND t-ratio FOR STUDENTS ENROLLED IN SECONDARY T & I AND STUDENTS ENROLLED IN GRADE EIGHT

Student Type	Kuder Interest Area	N	df	Mean	Variance	SD	$M_1 - M_2$	σ_D	t-ratio
Secondary T & I		178	177	29.78	84.00	9.17			
	Artistic						4.10	1.01	4.06**
Grade Eight		75	74	33.88	41.29	6.43			

* 1.97 Significant at or beyond the .05 level of confidence

** 2.59 Significant at or beyond the .01 level of confidence

TABLE CIII

STUDENT TYPE, LITERARY KUDER INTEREST AREA, NUMBER OF STUDENTS, MEAN, STANDARD DEVIATION, MEAN DIFFERENCE, STANDARD ERROR OF THE DIFFERENCE IN MEANS AND t-ratio FOR STUDENTS ENROLLED IN SECONDARY T & I AND STUDENTS ENROLLED IN GRADE EIGHT

Student Type	Kuder Interest Area	N	df	Mean	Variance	SD	M_1-M_2	σ_D	t-ratio
Secondary T & I		178	177	31.89	111.75	10.57			
	Literary						1.51	1.42	1.06
Grade Eight		75	74	30.38	105.29	10.26			

* 1.97 Significant at or beyond the .05 level of confidence

** 2.59 Significant at or beyond the .01 level of confidence

TABLE CIV

STUDENT TYPE, MUSICAL KUDER INTEREST AREA, NUMBER OF STUDENTS, MEAN, STANDARD DEVIATION, MEAN DIFFERENCE, STANDARD ERROR OF THE DIFFERENCE IN MEANS AND t-ratio FOR STUDENTS ENROLLED IN SECONDARY T & I AND STUDENTS ENROLLED IN GRADE EIGHT

Student Type	Kuder Interest Area	N	df	Mean	Variance	SD	$M_1 - M_2$	σ_D	t-ratio
Secondary T & I		178	177	15.11	67.88	8.24			
	Musical						2.36	0.76	3.11**
Grade Eight		75	74	12.75	14.86	3.86			

* 1.97 Significant at or beyond the .05 level of confidence

** 2.59 Significant at or beyond the .01 level of confidence

TABLE CV

STUDENT TYPE, SOCIAL SERVICE KUDER INTEREST AREA, NUMBER OF STUDENTS, MEAN, STANDARD DEVIATION, MEAN DIFFERENCE, STANDARD ERROR OF THE DIFFERENCE IN MEANS AND t-ratio FOR STUDENTS ENROLLED IN SECONDARY T & I AND STUDENTS ENROLLED IN GRADE EIGHT

Student Type	Kuder Interest Area	N	df	Mean	Variance	SD	M_1-M_2	σ_D	t-ratio
Secondary T & I		178	177	47.22	193.75	13.92			
	Social Service						2.28	2.27	1.00
Grade Eight		75	74	49.50	306.29	17.50			

* 1.97 Significant at or beyond the .05 level of confidence

** 2.59 Significant at or beyond the .01 level of confidence

TABLE CVI

STUDENT TYPE, CLERICAL KUDER INTEREST AREA, NUMBER OF STUDENTS, MEAN, STANDARD DEVIATION, MEAN DIFFERENCE, STANDARD ERROR OF THE DIFFERENCE IN MEANS AND t-ratio FOR STUDENTS ENROLLED IN SECONDARY T & I AND STUDENTS ENROLLED IN GRADE EIGHT

Student Type	Kuder Interest Area	N	df	Mean	Variance	SD	M_1-M_2	σ_{σ}	t-ratio
Secondary T & I		178	177	62.33	153.88	12.40			
	Clerical						3.58	1.42	2.52*
Grade Eight		75	74	58.75	87.14	9.33			

* 1.97 Significant at or beyond the .05 level of confidence

** 2.59 Significant at or beyond the .01 level of confidence

Analysis of the data that developed from the comparisons involving grade eight students and secondary students enrolled in an academic curriculum appeared to result in limited assertions. However, the interest patterns of grade eight students appeared to be closely aligned with the interest patterns of secondary students enrolled in an academic program. The data for grade eight students' answers compared to secondary academic students' answers are presented in Tables CVII - CXVI.

Secondary T & I compared to Secondary Academic. Seven of ten interest area comparisons provided t-ratio differences that were statistically significant at or beyond the 0.05 level of confidence for secondary T & I students and secondary academic students. The interest areas and t-ratio values for these groups are as follows: (1) Outdoor, 2.28*; (2) Mechanical, 6.37**; (3) Computational, 7.55**; (4) Scientific, 1.89; (5) Persuasive, 0.26; (6) Artistic, 2.95**; (7) Literary, 4.48**; (8) Musical, 7.62**; (9) Social Service, 0.58; and, (10) Clerical, 2.23*. (*denotes 0.05 level and ** denotes 0.01 level).

The data acquired from the secondary students in a T & I program and secondary students in an academic program appeared to indicate that a definite difference existed between these students. The T & I students had higher mean scores than the academic program students on the interest areas of Outdoor, Mechanical, Computational, Musical, and Clerical. Responses to Persuasive questions as an interest area were not significantly different, however, the T & I students provided the largest mean score. These data appear in Tables CXVII - CXXVI.

Conclusions extracted from t-ratio values. The differences between a general population of sixth, seventh, and eighth grade students and secondary students appeared larger when the middle school students were compared to the T & I group of the secondary population. This assumption was extracted from the following: (1) Seven of ten significant t-ratio values for grade six and T & I students; (2) Nine of ten significant t-ratio values for grade seven and T & I students; and, (3) Six of ten significant t-ratio values for grade eight and T & I students.

Students enrolled in grade eight appeared to have responded to the interest survey items in a fashion closely aligned to the secondary students in an academic curriculum. Sixth and seventh grade students did not respond in a fashion that correlated significantly with the secondary academic group.

Continued research in the area of interest patterns and secondary curriculum selection would appear to enhance the career education concept inasmuch as data would be collected to facilitate curriculum planning and guidance services. Also, these data would appear to provide career education decision-makers with a point of departure in meeting the increasingly complex needs of students.

TABLE CVII

STUDENT TYPE, OUTDOOR KUDER INTEREST AREA, NUMBER OF STUDENTS, MEAN, STANDARD DEVIATION, MEAN DIFFERENCE, STANDARD ERROR OF THE DIFFERENCE IN MEANS AND t-ratio FOR STUDENTS ENROLLED IN SECONDARY ACADEMIC AND STUDENTS ENROLLED IN GRADE EIGHT

Student Type	Kuder Interest Area	N	df	Mean	Variance	SD	M_1-M_2	σ_D	t-ratio
Secondary Academic		100	99	23.44	40.00	6.33			
	Outdoor						0.19	0.87	0.22
Grade Eight		75	74	23.63	26.43	5.14			

* 1.97 Significant at or beyond the .05 level of confidence

** 2.60 Significant at or beyond the .01 level of confidence

TABLE CVIII

STUDENT TYPE, MECHANICAL KUDER INTEREST AREA, NUMBER OF STUDENTS, MEAN, STANDARD DEVIATION, MEAN DIFFERENCE, STANDARD ERROR OF THE DIFFERENCE IN MEANS AND t-ratio FOR STUDENTS ENROLLED IN SECONDARY ACADEMIC AND STUDENTS ENROLLED IN GRADE EIGHT

Student Type	Kuder Interest Area	N	df	Mean	Variance	SD	M_1-M_2	σ_D	t-ratio
Secondary Academic		100	99	34.33	264.37	16.26			
	Mechanical						0.67	2.18	0.31
Grade Eight		75	74	35.00	158.00	12.57			

* 1.97 Significant at or beyond the .05 level of confidence

** 2.60 Significant at or beyond the .01 level of confidence

TABLE CIX

STUDENT TYPE, COMPUTATIONAL KUDER INTEREST AREA, NUMBER OF STUDENTS, MEAN, STANDARD DEVIATION, MEAN DIFFERENCE, STANDARD ERROR OF THE DIFFERENCE IN MEANS AND t-ratio FOR STUDENTS ENROLLED IN SECONDARY T & I AND STUDENTS ENROLLED IN GRADE EIGHT

Student Type	Kuder Interest Area	N	df	Mean	Variance	SD	$M_1 - M_2$	σ_D	t-ratio
Secondary Academic		100	99	25.89	107.13	10.35			
	Computational						0.64	1.39	0.46
Grade Eight		75	74	25.25	66.43	8.15			

* 1.97 Significant at or beyond the .05 level of confidence

** 2.60 Significant at or beyond the .01 level of confidence

TABLE CX

STUDENT TYPE, SCIENTIFIC KUDER INTEREST AREA, NUMBER OF STUDENTS, MEAN, STANDARD DEVIATION, MEAN DIFFERENCE, STANDARD ERROR OF THE DIFFERENCE IN MEANS AND t-ratio FOR STUDENTS ENROLLED IN SECONDARY ACADEMIC AND STUDENTS ENROLLED IN GRADE EIGHT

Student Type	Kuder Interest Area	N	df	Mean	Variance	SD	M_1-M_2	σ_D	t-ratio
Secondary Academic		100	99	31.78	215.00	14.67			
	Scientific						0.53	1.83	0.29
Grade Eight		75	74	31.25	89.71	9.47			

* 1.97 Significant at or beyond the .05 level of confidence

** 2.60 Significant at or beyond the .01 level of confidence

TABLE CXI

STUDENT TYPE, PERSUASIVE KUDER INTEREST AREA, NUMBER OF STUDENTS, MEAN, STANDARD DEVIATION, MEAN DIFFERENCE, STANDARD ERROR OF THE DIFFERENCE IN MEANS AND t-ratio FOR STUDENTS ENROLLED IN SECONDARY ACADEMIC AND STUDENTS ENROLLED IN GRADE EIGHT

Student Type	Kuder Interest Area	N	df	Mean	Variance	SD	$M_1 - M_2$	σ_D	t-ratio
Secondary Academic		100	99	54.22	81.50	9.03			
	Persuasive						3.16	1.49	2.12*
Grade Eight		75	74	57.38	106.43	10.32			

* 1.97 Significant at or beyond the .05 level of confidence

** 2.60 Significant at or beyond the .01 level of confidence

TABLE CXII

STUDENT TYPE, ARTISTIC KUDER INTEREST AREA, NUMBER OF STUDENTS, MEAN, STANDARD DEVIATION, MEAN DIFFERENCE, STANDARD ERROR OF THE DIFFERENCE IN MEANS AND t-ratio FOR STUDENTS ENROLLED IN SECONDARY ACADEMIC AND STUDENTS ENROLLED IN GRADE EIGHT

Student Type	Kuder Interest Area	N	df	Mean	Variance	SD	$M_1 - M_2$	σ_D	t-ratio
Secondary Academic		100	99	33.67	126.13	11.23			
	Artistic						0.21	1.35	0.16
Grade Eight		75	74	33.88	41.29	6.43			

* 1.97 Significant at or beyond the .05 level of confidence

** 2.60 Significant at or beyond the .01 level of confidence

TABLE CXIII

STUDENT TYPE, LITERARY KUDER INTEREST AREA, NUMBER OF STUDENTS, MEAN, STANDARD DEVIATION, MEAN DIFFERENCE, STANDARD ERROR OF THE DIFFERENCE IN MEANS AND t-ratio FOR STUDENTS ENROLLED IN SECONDARY ACADEMIC AND STUDENTS ENROLLED IN GRADE EIGHT

Student Type	Kuder Interest Area	N	df	Mean	Variance	SD	$M_1 - M_2$	σ_D	t-ratio
Secondary Academic		100	99	37.67	103.38	10.17			
	Literary						7.29	1.56	4.67**
Grade Eight		75	74	30.38	105.29	10.26			

* 1.97 Significant at or beyond the .05 level of confidence

** 2.60 Significant at or beyond the .01 level of confidence

TABLE CXIV

STUDENT TYPE, MUSICAL KUDER INTEREST AREA, NUMBER OF STUDENTS, MEAN, STANDARD DEVIATION, MEAN DIFFERENCE, STANDARD ERROR OF THE DIFFERENCE IN MEANS AND t-ratio FOR STUDENTS ENROLLED IN SECONDARY ACADEMIC AND STUDENTS ENROLLED IN GRADE EIGHT

Student Type	Kuder Interest Area	N	df	Mean	Variance	SD	$M_1 - M_2$	σ_D	t-ratio
Secondary Academic		100	99	8.56	35.50	5.96			
	Musical						4.19	0.75	5.59**
Grade Eight		75	74	12.75	14.86	3.86			

* 1.97 Significant at or beyond the .05 level of confidence

** 2.60 Significant at or beyond the .01 level of confidence

TABLE CXV

STUDENT TYPE, SOCIAL SERVICE KUDER INTEREST AREA, NUMBER OF STUDENTS, MEAN, STANDARD DEVIATION, MEAN DIFFERENCE, STANDARD ERROR OF THE DIFFERENCE IN MEANS AND t-ratio FOR STUDENTS ENROLLED IN SECONDARY ACADEMIC AND STUDENTS ENROLLED IN GRADE EIGHT

Student Type	Kuder Interest Area	N	df	Mean	Variance	SD	M_1-M_2	σ_D	t-ratio
Secondary Academic		100	99	48.33	264.88	16.27			
	Social Service						1.17	2.59	0.45
Grade Eight		75	74	49.50	306.29	17.50			

* 1.97 Significant at or beyond the .05 level of confidence

** 2.60 Significant at or beyond the .01 level of confidence

TABLE CXVI

STUDENT TYPE, CLERICAL KUDER INTEREST AREA, NUMBER OF STUDENTS, MEAN, STANDARD DEVIATION, MEAN DIFFERENCE, STANDARD ERROR OF THE DIFFERENCE IN MEANS AND t-ratio FOR STUDENTS ENROLLED IN SECONDARY ACADEMIC AND STUDENTS ENROLLED IN GRADE EIGHT

Student Type	Kuder Interest Area	N	df	Mean	Variance	SD	$M_1 - M_2$	σ_D	t-ratio
Secondary Academic		100	99	58.33	232.63	15.25			
	Clerical						0.42	1.87	0.23
Grade Eight		75	74	58.75	87.14	9.33			

* 1.97 Significant at or beyond the .05 level of confidence

** 2.60 Significant at or beyond the .01 level of confidence

TABLE CXVII

STUDENT TYPE, OUTDOOR KUDER INTEREST AREA, NUMBER OF STUDENTS, MEAN, STANDARD DEVIATION, MEAN DIFFERENCE, STANDARD ERROR OF THE DIFFERENCE IN MEANS AND t-ratio FOR STUDENTS ENROLLED IN SECONDARY T & I AND STUDENTS ENROLLED IN SECONDARY ACADEMIC

Student Type	Kuder Interest Area	N	df	Mean	Variance	SD	$M_1 - M_2$	σ_D	t-ratio
Secondary T & I		178	177	25.67	105.63	10.28			
	Outdoor						2.23	0.98	2.28*
Secondary Academic		100	99	23.44	40.00	6.33			

* 1.97 Significant at or beyond the .05 level of confidence

** 2.59 Significant at or beyond the .01 level of confidence

TABLE CXVIII

STUDENT TYPE, MECHANICAL KUDER INTEREST AREA, NUMBER OF STUDENTS, MEAN, STANDARD DEVIATION, MEAN DIFFERENCE, STANDARD ERROR OF THE DIFFERENCE IN MEANS AND t-ratio FOR STUDENTS ENROLLED IN SECONDARY T & I AND STUDENTS ENROLLED IN SECONDARY ACADEMIC

Student Type	Kuder Interest Area	N	df	Mean	Variance	SD	$M_1 - M_2$	σ_{D}	t-ratio
Secondary T & I		178	177	46.44	170.75	13.07			
	Mechanical						12.11	1.90	6.37**
Secondary Academic		100	99	34.33	264.37	16.26			

* 1.97 Significant at or beyond the .05 level of confidence

** 2.59 Significant at or beyond the .01 level of confidence

TABLE CXIX

STUDENT TYPE, COMPUTATIONAL KUDER INTEREST AREA, NUMBER OF STUDENTS, MEAN, STANDARD DEVIATION, MEAN DIFFERENCE, STANDARD ERROR OF THE DIFFERENCE IN MEANS AND t-ratio FOR STUDENTS ENROLLED IN SECONDARY T & I AND STUDENTS ENROLLED IN SECONDARY ACADEMIC

Student Type	Kuder Interest Area	N	df	Mean	Variance	SD	$M_1 - M_2$	σ_D	t-ratio
Secondary T & I		178	177	35.33	89.63	9.47			
	Computational						9.44	1.25	7.55**
Secondary Academic		100	99	25.89	107.13	10.35			

* 1.97 Significant at or beyond the .05 level of confidence

** 2.59 Significant at or beyond the .01 level of confidence

TABLE CXX

STUDENT TYPE, SCIENTIFIC KUDER INTEREST AREA, NUMBER OF STUDENTS, MEAN, STANDARD DEVIATION, MEAN DIFFERENCE, STANDARD ERROR OF THE DIFFERENCE IN MEANS AND t-ratio FOR STUDENTS ENROLLED IN SECONDARY T & I AND STUDENTS ENROLLED IN SECONDARY ACADEMIC

Student Type	Kuder Interest Area	N	df	Mean	Variance	SD	M_1-M_2	σ_D	t-ratio
Secondary T & I		178	177	28.78	67.75	8.23			
	Scientific						3.00	1.59	1.89
Secondary Academic		100	99	31.78	215.00	14.67			

* 1.97 Significant at or beyond the .05 level of confidence

** 2.59 Significant at or beyond the .01 level of confidence

TABLE CXXI

STUDENT TYPE, PERSUASIVE KUDER INTEREST AREA, NUMBER OF STUDENTS, MEAN, STANDARD DEVIATION, MEAN DIFFERENCE, STANDARD ERROR OF THE DIFFERENCE IN MEANS AND t-ratio FOR STUDENTS ENROLLED IN SECONDARY T & I AND STUDENTS ENROLLED IN SECONDARY ACADEMIC

Student Type	Kuder Interest Area	N	df	Mean	Variance	SD	$M_1 - M_2$	σ_D	t-ratio
Secondary T & I		178	177	54.67	403.38	20.08			
	Persuasive						0.45	1.76	0.26
Secondary Academic		100	99	54.22	81.50	9.03			

* 1.97 Significant at or beyond the .05 level of confidence

** 2.59 Significant at or beyond the .01 level of confidence

TABLE CXXII

STUDENT TYPE, ARTISTIC KUDER INTEREST AREA, NUMBER OF STUDENTS, MEAN, STANDARD DEVIATION, MEAN DIFFERENCE, STANDARD ERROR OF THE DIFFERENCE IN MEANS AND t-ratio FOR STUDENTS ENROLLED IN SECONDARY T & I AND STUDENTS ENROLLED IN SECONDARY ACADEMIC

Student Type	Kuder Interest Area	N	df	Mean	Variance	SD	M_1-M_2	σ_D	t-ratio
Secondary T & I		178	177	29.78	84.00	9.17			
	Artistic						3.89	1.32	2.95**
Secondary Academic		100	99	33.67	126.13	11.23			

* 1.97 Significant at or beyond the .05 level of confidence

** 2.59 Significant at or beyond the .01 level of confidence

TABLE CXXIII

STUDENT TYPE, LITERARY KUDER INTEREST AREA, NUMBER OF STUDENTS, MEAN, STANDARD DEVIATION, MEAN DIFFERENCE, STANDARD ERROR OF THE DIFFERENCE IN MEANS AND t-ratio FOR STUDENTS ENROLLED IN SECONDARY T & I AND STUDENTS ENROLLED IN SECONDARY ACADEMIC

Student Type	Kuder Interest Area	N	df	Mean	Variance	SD	M_1-M_2	σ_D	t-ratio
Secondary T & I		178	177	31.89	111.75	10.57			
	Literary						5.78	1.29	4.48**
Secondary Academic		100	99	37.67	103.38	10.17			

* 1.97 Significant at or beyond the .05 level of confidence

** 2.59 Significant at or beyond the .01 level of confidence

TABLE CXXIV

STUDENT TYPE, MUSICAL KUDER INTEREST AREA, NUMBER OF STUDENTS, MEAN, STANDARD DEVIATION, MEAN DIFFERENCE, STANDARD ERROR OF THE DIFFERENCE IN MEANS AND t-ratio FOR STUDENTS ENROLLED IN SECONDARY T & I AND STUDENTS ENROLLED IN SECONDARY ACADEMIC

Student Type	Kuder Interest Area	N	df	Mean	Variance	SD	M_1-M_2	σ_D	t-ratio
Secondary T & I		178	177	15.11	67.88	8.24			
	Musical						6.55	0.86	7.62**
Secondary Academic		100	99	8.56	35.50	5.96			

* 1.97 Significant at or beyond the .05 level of confidence

** 2.59 Significant at or beyond the .01 level of confidence

TABLE CXXV

STUDENT TYPE, SOCIAL SERVICE KUDER INTEREST AREA, NUMBER OF STUDENTS, MEAN, STANDARD DEVIATION, MEAN DIFFERENCE, STANDARD ERROR OF THE DIFFERENCE IN MEANS AND t-ratio FOR STUDENTS ENROLLED IN SECONDARY T & I AND STUDENTS ENROLLED IN SECONDARY ACADEMIC

Student Type	Kuder Interest Area	N	df	Mean	Variance	SD	$M_1 - M_2$	σ_D	t-ratio
Secondary T & I		178	177	47.22	193.75	13.92			
	Social Service						1.11	1.93	0.58
Secondary Academic		100	99	48.33	264.88	16.27			

* 1.97 Significant at or beyond the .05 level of confidence

** 2.59 Significant at or beyond the .01 level of confidence

TABLE CXXVI

STUDENT TYPE, CLERICAL KUDER INTEREST AREA, NUMBER OF STUDENTS, MEAN, STANDARD DEVIATION, MEAN DIFFERENCE, STANDARD ERROR OF THE DIFFERENCE IN MEANS AND t-ratio FOR STUDENTS ENROLLED IN SECONDARY T & I AND STUDENTS ENROLLED IN SECONDARY ACADEMIC

Student Type	Kuder Interest Area	N	df	Mean	Variance	SD	M_1-M_2	σ_D	t-ratio
Secondary T & I		178	177	62.33	153.88	12.40			
	Clerical						4.00	1.79	2.23*
Secondary Academic		100	99	58.33	232.63	15.25			

* 1.97 Significant at or beyond the .05 level of confidence

** 2.59 Significant at or beyond the .01 level of confidence

Factor Analysis

PRESENTATION AND ANALYSIS OF DATA

The purpose of this study within the Career Education Project was to factorially determine the underlying constructs that were exhibited through the results of an interest survey, achievement test, and mental ability test with a cognitive view toward their inclusion in a model for predicting future enrollment in a non-college preparatory curriculum by middle school students. A premise of the study was to determine underlying constructs that were exhibited in data collected from three groups of students enrolled in four schools.

The statistical treatment procedures of this study dictated the establishment of a correlation matrix consisting of variables derived from the results of three standardized instruments. The relationships forms by the correlation matrix were investigated by factor analysis.

Thurstone's five principles of simple structure were used to determine if the factors established in this study achieved simple structure. Thurstone's principles of simple structure were stated as follows:

> 1. Each row of the factor matrix should have at least one loading close to zero.
>
> 2. For each column of the factor matrix there should be at least as many variables with zero or near-zero loadings as there are factors.
>
> 3. For every pair of factors (columns) there should be several variables with loadings in one factor (column) but not in the other.
>
> 4. When there are four or more factors, a large proportion of the variables should have negligible (close to zero) loadings on any pair of factors.
>
> 5. For every paid of factors (columns) of the factor matrix there should be only a small number of variables with appreciable (nonzero)

loadings in both columns.[1]

Three groups of students provided data for this study. The groups were: (1) students enrolled in a middle school, (2) secondary students enrolled in a non-college preparatory curriculum; and, (3) secondary students not enrolled in a non-college preparatory curriculum.

MIDDLE SCHOOL DATA

In order to determine the level of significance of the correlation coefficients, fiduciary limits were established at the .05 and .01 levels of confidence. A loss of two degrees of freedom for the two hundred middle school cases established a coefficient value of .14 to be significant at the .05 level of confidence and a coefficient value of .18 to be significant at the .01 level of confidence.

Middle School Intercorrelations

All correlation coefficients derived from intercorrelating the variables obtained from the *Iowa Tests of Basic Skills* were significant at the .01 level of confidence. These coefficients ranged in value from a low of .21 between Map Reading and Capitalization to a high of .95 between Arithmetic Concepts and Arithmetic Total. The intercorrelation coefficients for these variables are presented in Table CXXVII.

Significant relationships were found to exist between the variables provided by the *SRA-Primary Mental Abilities Tests*. The coefficients obtained from this standardized instrument were significant at the .01 level of confidence. These coefficients ranged in value from a high of .86 between Reasoning and PMA Total to a low of .38 between Verbal Meaning and Spatial Realtions. Intercorrelation coefficients for the variables of Verbal Meaning, Number Facility, Reasoning, Spatial Relations, and PMA Total are presented in Table CXXVIII.

Presented in Table CXXIX are coefficients derived from intercorrelating the variables contributed by the *Kuder General*

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[1] Fred N. Kerlinger, *Foundations of Behavioral Research* (New York: Holt, Rinehart and Winston, Inc., 1964), p. 669.

TABLE CXXVII

INTERCORRELATION COEFFICIENTS OF IOWA TESTS OF BASIC SKILLS SCORES OF 200 MIDDLE SCHOOL STUDENTS IN THREE SOUTHWEST LOUISIANA SCHOOLS

Variable	Vocabulary	Reading	Spelling	Capitalization	Usage
Vocabulary	-	.81*	.69*	.63*	.68*
Reading	.81*	-	.67*	.70*	.68*
Spelling	.69*	.67*	-	.68*	.66*
Capitalization	.63*	.70*	.68*	-	.64*
Usage	.68*	.68*	.66*	.64*	-
Language Total	.75*	.78*	.89*	.88*	.83*
Map Reading	.38*	.25*	.31*	.21*	.34*
Graph Reading	.68*	.71*	.55*	.57*	.59*
References	.63*	.74*	.63*	.60*	.68*
Work-Study Total	.73*	.77*	.67*	.62*	.72*
Arithmetic Concepts	.68*	.68*	.59*	.60*	.64*
Arithmetic Problems	.33*	.30*	.31*	.26*	.26*
Arithmetic Total	.66*	.65*	.58*	.58*	.60*
Composite Total	.83*	.85*	.79*	.77*	.78*

TABLE CXXVII (continued)

Variable	Language	Map Reading	Graph Reading	References	Work-Study Total
Vocabulary	.75*	.38*	.68*	.63*	.73*
Reading	.78*	.25*	.71*	.74*	.77*
Spelling	.89*	.31*	.55*	.63*	.67*
Capitalization	.88*	.21*	.57*	.60*	.62*
Usage	.83*	.34*	.59*	.68*	.72*
Language Total	-	.29*	.65*	.73*	.75*
Map Reading	.29*	-	.28*	.27*	.57*
Graph Reading	.65*	.28*	-	.63*	.78*
References	.73*	.27*	.63*	-	.92*
Work-Study Total	.75*	.57*	.78*	.92*	-
Arithmetic Concepts	.69*	.43*	.64*	.64*	.73*
Arithmetic Problems	.30*	.65*	.25*	.25*	.44*
Arithmetic Total	.66*	.56*	.60*	.60*	.74*
Composite Total	.89*	.43*	.71*	.79*	.86*

TABLE CXXVII (continued)

Variable	Arithmetic Concepts	Arithmetic Problems	Arithmetic Total	Composite Total
Vocabulary	.68*	.33*	.66*	.83*
Reading	.68*	.30*	.65*	.85*
Spelling	.59*	.31*	.58*	.79*
Capitalization	.60*	.26*	.58*	.77*
Usage	.64*	.26*	.60*	.78*
Language Total	.69*	.30*	.66*	.89*
Map Reading	.43*	.65*	.56*	.43*
Graph Reading	.64*	.25*	.60*	.71*
References	.64*	.25*	.60*	.79*
Work-Study Total	.73*	.44*	.74*	.86*
Arithmetic Concepts	-	.43*	.95*	.79*
Arithmetic Problems	.43*	-	.68*	.43*
Arithmetic Total	.95*	.68*	-	.79*
Composite Total	.79*	.43*	.79*	-

*Significant at or beyond the .05 level of confidence.

TABLE CXXVIII

INTERCORRELATION COEFFICIENTS OF SRA-PRIMARY MENTAL ABILITIES TESTS SCORES OF 200 MIDDLE SCHOOL STUDENTS IN THREE SOUTHWEST LOUISIANA SCHOOLS

Variable	Verbal Meaning	Number Facility	Reasoning	Spatial Relations	PMA Total
Verbal Meaning	-	.59*	.60*	.38*	.74*
Number Facility	.59*	-	.67*	.45*	.75*
Reasoning	.60*	.67*	-	.56*	.86*
Spatial Relations	.38*	.45*	.56*	-	.83*
PMA Total	.74*	.75*	.86*	.83*	-

*Significant at or beyond the .05 level of confidence.

TABLE CXXIX

INTERCORRELATION COEFFICIENTS OF KUDER GENERAL INTEREST SURVEY SCORES OF 200 MIDDLE SCHOOL STUDENTS IN THREE SOUTHWEST LOUISIANA SCHOOLS

Variable	Outdoor	Mechanical	Computational	Scientific	Persuasive
Outdoor	-	.06	-.05	-.01	-.04
Mechanical	.06	-	.08	.33*	.09
Computational	-.05	.08	-	-.03	.26*
Scientific	-.01	.34*	-.03	-	-.06
Persuasive	-.04	.09	.26*	-.06	-
Artistic	.02	-.02	-.00	-.12	.04
Literary	-.21*	-.41*	.12	-.12	-.01
Music	.05	-.02	.11	.03	.23*
Social Service	-.01	-.30*	-.13	-.27*	-.11
Clerical	-.05	-.13	.26*	-.17*	.23*

TABLE CXXIX (continued)

Variable	Artistic	Literary	Music	Social Service	Clerical
Outdoor	.02	-.21*	.05	-.01	-.05
Mechanical	-.02	-.41*	-.02	-.28*	-.13
Computational	-.00	.12	.11	-.13	.26*
Scientific	-.13	-.12	.03	-.27*	-.17*
Persuasive	.04	-.01	.23*	-.11	.23*
Artistic	-	-.01	-.01	.19	-.01
Literary	-.01	-	.03	.07	.23*
Music	-.01	.03	-	-.16*	-.00
Social Service	.18*	.07	-.16*	-	.10
Clerical	-.01	.23	-.00	.10	-

*Significant at or beyond the .05 level of confidence.

Interest Survey. Significant levels of correlation were observable at the .01 level of confidence for some of the variables while others appeared not to be correlated to any degree. Intercorrelating the Artistic and Computational variables produced a coefficient of -.00, and the intercorrelation of Clerical and Music variables provided a coefficient of -.00. A coefficient of -.41 was computed for the Literary and Mechanical variables. The range of coefficients on this survey was from a low correlation of -.00 and to a high correlation of -.41.

Coefficients derived from intercorrelating the variables from the Iowa Tests of Basic Skills and SRA-Primary Mental Abilities Tests are presented in Table CXXX. Six of these coefficients were not significant at the .01 level of confidence, but the remaining sixty-four were significant at the .01 level of confidence.

The hypothesis Ho_1 was rejected on the basis of the coefficients presented in Table IV. The hypothesis stated that no significant relationships would be found among the scores on the Iowa Tests of Basic Skills and the scores on the SRA-Primary Mental Abilities Tests in the middle school group. Since most of the coefficients computed from these instruments were significant at the .01 level of confidence, the hypothesis Ho_1 was rejected.

The range of coefficients between mental ability and achievement was established by a low correlation of -.02 Map Reading and Spatial Relations and a high correlation of .73 for Reading and Verbal Meaning. In this range, all of the achievement variables correlated significantly with Number Facility and Reasoning. A large number of coefficients clustered in the .20's and .30's on Spatial Relations and the achievement variables. Most of the other coefficients ranged in value between the .50's and .60's.

The hypothesis Ho_2 was rejected on the basis that the coefficients between the variables of the Iowa Tests of Basic Skills and Kuder General Interest Survey were significant at the .01 level of confidence. The hypothesis stated no significant relationships would be found among those scores. The variables significant at the .01 level of confidence were: (1) Spelling and Mechanical at -.18; (2) Reading and Computational at -.21; (3) Spelling and Computational at -.18; (4) Capitalization and Computational at -.19; (5) Language Total and Computational at -.21; (6) Work-Study Total and Computational at -.18; and, (7) Composite Total and Computational at -.19. The coefficients for Artistic and the achievement variables of Capitalization, Usage, Map Reading, Work-Study Total, and Composite Total were significant at the .01 level of confidence. Table CXXXI presents the coefficients for achievement and interest variables.

TABLE CXXX

INTERCORRELATION COEFFICIENTS OF IOWA TESTS OF BASIC SKILLS AND SRA-PRIMARY MENTAL ABILITIES TESTS SCORES OF 200 MIDDLE SCHOOL STUDENTS IN THREE SOUTHWEST LOUISIANA SCHOOLS

Variable	Verbal Meaning	Number Facility	Reasoning	Spatial Relations	PMA Total
Vocabulary	.71*	.57*	.55*	.27*	.59*
Reading	.73*	.61*	.62*	.32*	.65*
Spelling	.62*	.48*	.55*	.20*	.52*
Capitalization	.60*	.51*	.60*	.34*	.60*
Usage	.50*	.43*	.48*	.24*	.48*
Language Total	.66*	.53*	.62*	.30*	.61*
Map Reading	.10	.24*	.22*	-.02	.13
Graph Reading	.51*	.54*	.50*	.28*	.52*
References	.59*	.54*	.64*	.35*	.62*
Work-Study Total	.56*	.58*	.63*	.30*	.60*
Arithmetic Concepts	.53*	.62*	.56*	.33*	.58*
Arithmetic Problems	.15*	.27*	.20*	.05	.17*
Arithmetic Total	.48*	.59*	.52*	.28*	.53*
Composite Total	.70*	.62*	.64*	.35*	.66*

*Significant at or beyond the .05 level of confidence.

TABLE CXXXI

INTERCORRELATION COEFFICIENTS OF IOWA TESTS OF BASIC SKILLS AND KUDER GENERAL INTEREST SURVEY SCORES OF 200 MIDDLE SCHOOL STUDENTS IN THREE SOUTHWEST LOUISIANA SCHOOLS

Variable	Outdoor	Mechanical	Computational	Scientific	Persuasive
Vocabulary	.01	.02	-.17*	.13	-.07
Reading	-.03	-.05	-.21*	.02	-.16*
Spelling	-.09	-.18*	-.18*	.02	-.07
Capitalization	-.05	-.09	-.19*	-.03	-.09
Usage	-.01	-.06	-.16*	.10	-.08
Language Total	-.06	-.14*	-.21*	.02	-.10
Map Reading	.14*	-.06	-.09	.10	-.02
Graph Reading	-.02	-.01	-.17*	.06	-.10
References	.02	-.10	-.17*	-.10	-.12
Work-Study Total	.05	-.08	-.18*	.05	-.12
Arithmetic Concepts	.02	.05	-.11	.04	-.11
Arithmetic Problems	.06	.08	-.06	.07	.10
Arithmetic Total	.04	.06	-.11	.06	-.08
Composite Total	.02	-.08	-.19*	.08	-.12

TABLE CXXXI (continued)

Variable	Artistic	Literary	Music	Social Service	Clerical
Vocabulary	.11	-.07	.02	.05	-.10
Reading	.17*	.03	-.06	.19*	-.11
Spelling	.06	.06	-.10	.17*	-.03
Capitalization	.18*	.06	-.12	.18*	-.05
Usage	.28*	.11	-.03	.19*	-.02
Language Total	.17*	-.02	-.08	.23*	-.01
Map Reading	.20*	-.05	-.00	-.04	-.18*
Graph Reading	.15*	-.14*	-.06	.10	-.12
Reference	.17*	-.03	-.06	.21*	-.03
Work-Study Total	.21*	-.08	-.06	.15*	-.11
Arithmetic Concepts	.19*	-.12	-.05	.15*	-.07
Arithmetic Problems	.06	-.16*	-.03	-.04	-.15
Arithmetic Total	.17*	-.15*	-.05	.11	-.11
Composite Total	.18*	-.06	-.03	.16*	-.10

*Significant at or beyond the .05 level of confidence.

Presented in Table CXXXII are the coefficients upon which the rejection of Ho_3 was based. Hypothesis Ho_3 stated that no significant relationships would be found among the scores of the *SRA-Primary Mental Abilities Tests* and the scores of the *Kuder General Interest Survey for the* middle school group. The coefficients significant at the .01 level of confidence were: (1) Verbal Meaning and Computational at -.21; (2) Verbal Meaning and Social Service at .19; (3) Reasoning and Social Service at .28; (4) Literary and Spatial Relations at -.22; (5) Artistic and PMA Total at .18; and, (6) Literary and PMA Total at -.18. These coefficients were bipolar inasmuch as three correlate negatively and three correlate positively.

Mental ability and interest variables produced coefficients that ranged from a low of .00 to a high of .28. A majority of these coefficients were not significant at the .05 level of confidence.

Sufficient factors were found among the results of the middle school group to accept hypothesis Ho_7. Hypothesis Ho_7 stated that sufficient factors would be found to account for at least seventy percent of the variance observed among the variables within the intercorrelation matrix computed from the tests and survey results of the middle school group. Presented in Table VII is the cumulative percent of variance based upon the eigenvalues which indicated that four factors accounted for 75.51 percent of the variance among the variables.

The data in Table CXXXIII indicates factor one controlled 51.62 of the variance. Factors two, three, and four accounted for 9.71 percent, 8.20 percent, and 5.98 percent of the variance respectively. The remaining factors accounted for 24.47 percent of the variance traced among the twenty-nine variables.

Middle School Factors

Analysis of the data continued beyond the correlation coefficients due to the large number of significant correlation coefficients. This analysis was made using factor analysis.

Five factors are presented in Table CXXIV. This representation of the unrotated factor matrix failed to achieve simple structure. Factor loadings on the variables Map Reading, Number Facility, Social Service, and Clerical caused the rejection of the first principle of simple structure. These variables did not have a factor loading in the rows of the matrix that approach zero or near zero.

TABLE CXXXII

INTERCORRELATION COEFFICIENTS OF SRA-PRIMARY MENTAL ABILITIES TESTS AND KUDER GENERAL INTEREST SURVEY SCORES OF 200 MIDDLE SCHOOL STUDENTS IN THREE SOUTHWEST LOUISIANA SCHOOLS

Variable	Verbal Meaning	Number Facility	Reasoning	Spatial Relation	PMA Total
Outdoor	.04	.12	.11	.06	.10
Mechanical	-.06	.10	.00	.17*	.08
Computational	-.21*	-.03	-.12	-.14*	-.17*
Scientific	.04	-.05	-.02	.00	.00
Persuasive	-.11	-.03	-.13	-.02	-.09
Artistic	.13	.16*	.17*	.14*	.18*
Literary	-.06	-.12	-.12	-.22*	-.18*
Music	-.08	-.01	-.11	-.05	-.08
Social Services	.19*	.14*	.28*	.10	.21*
Clerical	-.10	-.07	-.09	-.07	-.10

*Significant at or beyond the .05 level of confidence.

TABLE CXXXIII

EIGENVALUES AND CUMULATIVE PERCENT OF VARIANCE OF EXTRACTED FACTORS FROM ACHIEVEMENT, MENTAL ABILITY, AND INTEREST VARIABLES OF 200 MIDDLE SCHOOL STUDENTS IN THREE SOUTHWEST LOUISIANA SCHOOLS

Factors	Eigenvalues	Cumulative Percent of Variance
1	11.53	51.62
2	2.03	61.33
3	1.71	69.53
4	1.04	75.51
5	0.86	78.63
6	0.69	81.92
7	0.61	84.83
8	0.57	87.58
9	0.43	90.65
10	0.40	92.56
11	0.39	94.41
12	0.35	95.10
13	0.25	96.31
14	0.22	97.37
15	0.21	98.37
16	0.18	99.24
17	0.09	99.68
18	0.06	99.98
19	-0.00	0.00
20	-0.00	0.00
21	-0.00	0.00
22	-0.06	0.00
23	-0.02	0.00
24	-0.04	0.00
25	-0.06	0.00
26	-0.08	0.00
27	-0.12	0.00
28	-0.20	0.00
29	-0.23	0.00

TABLE CXXXIV

UNROTATED FACTOR MATRIX OF ACHIEVEMENT, MENTAL ABILITY, AND INTEREST VARIABLES OF 200 MIDDLE SCHOOL STUDENTS IN THREE SOUTHWEST LOUISIANA SCHOOLS

Variable	Factors				
	1	2	3	4	5
Vocabulary	-.83	-.08	.04	-.22	.10
Reading	-.87	-.06	.12	-.13	-.01
Spelling	-.79	-.03	.33	-.10	-.03
Capitalization	-.79	.11	.18	-.06	-.01
Usage	-.78	-.09	.19	-.13	.05
Language Total	-.90	.03	.30	-.11	.04
Map Reading	-.43	-.70	-.14	.28	-.17
Graph Reading	-.77	-.04	.02	-.22	.02
References	-.83	.06	.14	.01	-.04
Work-Study Total	-.90	-.19	.05	.04	-.07
Arithmetic Concepts	-.84	-.19	-.10	.08	.14
Arithmetic Problems	-.43	-.66	-.28	.24	-.04
Arithmetic Total	-.82	-.37	-.18	.14	.10
Composite Total	-.94	-.09	.10	-.07	.03
Verbal Meaning	-.76	.30	.04	-.14	-.04
Number Facility	-.72	.19	-.28	.19	.22
Reasoning	-.76	.34	-.18	.23	-.10
Spatial Relations	-.46	.53	-.51	.15	-.02
PMA Total	-.79	.47	-.33	.14	-.02
Outdoor	-.03	-.02	-.23	.09	-.10
Mechanical	.03	-.04	-.56	-.33	.15
Computational	.21	-.04	-.01	.12	.45
Scientific	-.04	-.16	-.24	-.44	-.00
Persuasive	.13	-.04	-.04	-.09	.47
Artistic	-.21	.00	.01	.21	.01
Literary	.11	.03	.47	.18	.10
Music	.08	-.07	-.04	-.03	.27
Social Service	-.20	.22	.26	.34	.19
Clerical	.11	.11	.26	.20	.37

The factors presented in Table CXXXIV were not named since simple structure was not achieved. The rotation of the axes of the factors was the next procedure in an attempt to achieve simple structure.

Presented in Table CXXXV are five factors from the orthogonal rotation of the factor matrix. An orthogonal rotation of the factor axes retained the right angle of the vectors.

The orthogonal rotation of the factor matrix satisfied the five simple structure principles. Principle one was achieved since each row of the factor matrix had at least one loading close to zero. There were as many variables with zero loadings as there were factors which satisfied principle two. The requirements of principle three were met since a pair of factors had loadings on one factor but not on the second factor. Principle four was achieved because a large proportion of the variables had negligible loadings on any pair of factors. The fifth principle was reached due to the fact that every pair of factors of the matrix indicated only a small number of variables with loadings on both factors.

An oblique rotation of the factor axes was performed in an attempt to secure the highest possible loadings on the variables for each factor in the matrix. The oblique rotation changed the angle of the factor axes to either an obtuse or an acute angle.

The oblique transformation did not produce a significant change in the factor loadings that were achieved by an orthogonal rotation. The results of the oblique rotation are presented in Table CXXXVI.

Factors were named from the oblique factor matrix. Factors one, two, and three were named, but factors four and five were not named.

Factor 1. The loadings on factor one were highest on the following variables: (1) Language Total (-.97); (2) Composite Total (-.92); (3) Spelling (-.89); (4) Reading (-.85); (5) Capitalization (-.84); and (6) Vocabulary (-.83). Each variable with a high loading on factor one appeared to be related to the use of language. The apparent relationship of these loadings to language resulted in factor one being named language facility.

Factor 2. Factor two was named computational skill. This name was applied since the factor loadings on factor two were highest on the following variables: (1) Arithmetic Problems (-.90); (2) Map Reading (-.87); and (3) Arithmetic Total (-.62).

TABLE CXXXV

ORTHOGONAL FACTOR MATRIX OF ACHIEVEMENT, MENTAL ABILITY, AND INTEREST VARIABLES OF 200 MIDDLE SCHOOL STUDENTS IN THREE SOUTHWEST LOUISIANA SCHOOLS

Variable	Factors				
	1	2	3	4	5
Vocabulary	-.84	-.14	-.06	-.11	-.04
Reading	-.85	-.05	-.12	.04	-.17
Spelling	-.86	-.17	-.03	.13	-.07
Capitalization	-.81	-.05	-.15	.05	-.12
Usage	-.80	-.09	-.01	-.05	-.04
Language Total	-.95	-.09	-.08	.08	-.08
Map Reading	-.25	-.81	.13	-.02	-.05
Graph Reading	-.72	.00	-.03	-.11	-.15
References	-.76	-.08	-.18	.09	-.09
Work-Study Total	-.78	-.31	-.09	.03	-.12
Arithmetic Concepts	-.70	-.33	-.14	-.03	-.04
Arithmetic Problems	-.24	-.88	-.02	-.13	-.03
Arithmetic Total	-.65	-.56	-.12	-.07	-.04
Composite Total	-.90	-.24	-.13	.00	-.09
Verbal Meaning	-.77	.08	-.26	.09	-.19
Number Facility	-.60	-.07	-.26	.01	.12
Reasoning	-.61	-.05	-.43	.09	-.11
Spatial Relations	.23	.03	-.94	-.11	-.05
PMA Total	-.62	.01	-.70	.00	-.09
Outdoor	.06	-.08	-.04	-.09	-.06
Mechanical	.08	.02	-.12	-.65	.08
Computational	.15	.02	.06	.01	.49
Scientific	-.08	-.04	.05	-.50	-.05
Persuasive	.07	-.02	-.02	-.05	.52
Artistic	-.14	-.06	-.08	.13	.04
Literary	.01	.04	.13	.47	.15
Music	.03	-.01	.03	-.07	.30
Social Service	-.14	.07	-.10	.46	-.18
Clerical	.02	.12	.02	.27	.40

TABLE CXXXVI

OBLIQUE FACTOR MATRIX OF ACHIEVEMENT, MENTAL ABILITY, AND INTEREST VARIABLES OF 200 MIDDLE SCHOOL STUDENTS IN THREE SOUTHWEST LOUISIANA SCHOOLS

Variable	Factors				
	1	2	3	4	5
Vocabulary	-.83	-.29	-.34	-.07	-.32
Reading	-.85	-.19	-.41	.08	-.43
Spelling	-.89	-.31	-.26	.20	-.23
Capitalization	-.84	-.18	-.40	.13	-.32
Usage	-.77	-.23	-.27	.02	-.26
Language Total	-.97	-.25	-.36	.16	-.30
Map Reading	-.27	-.87	.02	-.08	-.21
Graph Reading	-.67	-.12	-.30	-.09	-.40
References	-.76	-.20	-.41	.13	-.34
Work-Study Total	-.77	-.44	-.35	.04	-.40
Arithmetic Concepts	-.72	-.39	-.38	-.03	-.30
Arithmetic Problems	-.32	-.90	-.07	-.18	-.14
Arithmetic Total	-.69	-.62	-.33	-.08	-.29
Composite Total	-.92	-.38	-.41	.05	-.37
Verbal Meaning	-.79	-.05	-.52	.12	-.45
Number Faciltiy	-.59	-.19	-.53	-.01	-.25
Reasoning	-.66	-.18	-.68	-.11	-.43
Spatial Relations	-.34	.03	-.98	-.11	-.29
PMA Total	-.69	-.09	-.91	.02	-.44
Outdoor	.06	-.11	-.09	-.12	-.15
Mechanical	.10	-.03	-.14	-.66	-.02
Computational	.20	.06	.14	-.00	.49
Scientific	-.07	-.11	.02	-.49	-.09
Persuasive	.11	.01	.04	-.05	.48
Artistic	-.13	-.08	-.16	.13	.07
Literary	.01	.10	.21	.48	.27
Music	.08	-.00	.06	-.08	.26
Social Service	-.18	.09	-.16	.47	-.19
Clerical	.06	.17	.08	.29	.44

Map Reading appeared to be out of place when factor two was named computational skill. Consideration of the type of problems that comprised this variable, however, confirmed the naming of the factor. Map Reading in the *Iowa Tests of Basic Skills* was a test section requiring the use of numbers to arrive at correct responses.

Factor 3. Numerical loadings on factor three were highest on the variables outlined below: (1) Spatial Relations (-.98); (2) PMA Total (-.91); (3) Reasoning (-.68); (4) Number Facility (-.53); and, (5) Verbal Meaning (-.52). This factor was named mental ability since the factor loadings were greatest on the variables acquired from the *SRA-Primary Mental Abilities Tests*.

Factor 4. Factor four was loaded highest on the following variables: (1) Mechanical (-.66); (2) Scientific (-.49); (3) Literary (.48); and, (4) Social Service (.47). These four variables were from the *Kuder General Interest Survey*. No attempt was made to name this factor.

Factor 5. The loadings on factor five were highest on the following variables: (1) Computational (.49); (2) Persuasive (.48); (3) Verbal Meaning (-.45); (4) PMA Total (-.44); and, (5) Clerical (.44). No attempt was made to name this factor after the data were analyzed.

SECONDARY SAMPLE DATA

Fiduciary limits were established for the secondary sample list at the .05 and .01 levels of confidence. With 178 sets of scores and 176 degrees of freedom, a correlation coefficient value of .15 was necessary for the coefficient to be termed significant at the .05 level of confidence, and a correlation coefficient value of .19 was necessary for the coefficient to be termed significant at the .01 level of confidence.

Secondary Sample Intercorrelations

All intercorrelation coefficients of the *Iowa Tests of Educational Development* were significant at the .01 level of confidence. These coefficients ranged from a low of .49 to a high of .95. The correlation between Spelling and Social Studies, and the correlation between Spelling and Science produced the .49 coefficient. A correlation of Reading Comprehension and Reading Total established the .95 coefficient. These coefficients were presented in Table CXXXVII.

TABLE CXXXVII

INTERCORRELATION COEFFICIENTS OF IOWA TESTS OF EDUCATIONAL DEVELOPMENT SCORES OF 178 STUDENTS IN A NON-COLLEGE PREPARATORY CURRICULUM

Variable	Reading Comprehension	Vocabulary	Reading Total	Language Arts Usage	Spelling
Reading Comprehension	-	.76*	.95*	.60*	.62*
Vocabulary	.76*	-	.93*	.63*	.63*
Reading Total	.95*	.93*	-	.65*	.67*
Language Arts Usage	.60*	.63*	.65*	-	.56*
Spelling	.62*	.63*	.67*	.56*	-
Language Arts Total	.69*	.71*	.75*	.88*	.88*
Mathematics	.60*	.58*	.63*	.51*	.50*
Social Studies	.80*	.67*	.79*	.53*	.49*
Science	.81*	.61*	.76*	.50*	.49*
Use of Sources	.59*	.57*	.62*	.60*	.50*
Composite Total	.89*	.88*	.94*	.80*	.81*

TABLE CXXXVII (continued)

Variable	Language Arts Total	Mathematics	Social Studies	Science	Use of Sources	Composite Total
Reading Comprehension	.69*	.60*	.80*	.81*	.59*	.89*
Vocabulary	.71*	.58*	.67*	.61*	.57*	.88*
Reading Total	.75*	.63*	.79*	.76*	.62*	.94*
Language Arts Usage	.88*	.51*	.53*	.50*	.60*	.80*
Spelling	.88*	.50*	.49*	.49*	.50*	.81*
Language Arts Total	-	.57*	.58*	.56*	.62*	.91*
Mathematics	.57*	-	.61*	.54*	.53*	.74*
Social Studies	.58*	.61*	-	.75*	.65*	.76*
Science	.56*	.54*	.75*	-	.63*	.72*
Use of Sources	.62*	.53*	.65*	.63*	-	.68*
Composite Total	.91*	.74*	.76*	.72*	.68*	-

*Significant at or beyond the .05 level of confidence.

Presented in Table CXXXVIII are the intercorrelations of the variables from the SRA-Primary Mental Abilities Tests. The variables named PMA Total and Reasoning provided a coefficient of .77. Intercorrelating Spatial Relations and Verbal Meaning established a coefficient of .10, and this coefficient was the only coefficient not significant at the .01 level of confidence.

Several coefficients from the intercorrelation matrix of the variables produced by the Kuder General Interest Survey were not significant at the .05 or .01 levels of confidence. The fourteen coefficients that were not significant had values between a -.14 and .11. The thirty-one coefficients that were significant at the .05 level clustered in the .30's and .40's. These coefficients are presented in Table CXXXIX.

Presented in Table CXL are the coefficients derived from intercorrelating achievement and mental ability measures. These coefficients provided the basis from which the hypothesis Ho_4 was rejected.

Hypothesis Ho_4 indicated that there was to be no significant relationships found among the scores on the Iowa Tests of Educational Development and the scores on the SRA-Primary Mental Abilities Tests in the non-college preparatory curriculum group. All of the coefficients from the achievement test and mental abilities test were significant at the .05 level of confidence. Forty-five of the fifty-five coefficients were significant at the .01 level of confidence. These coefficients. ranging in value from .15 to .49, were used to reject hypothesis Ho_4.

The smallest coefficient was produced by correlating Social Studies and Spatial Relations. Composite Total correlated with PMA Total established the largest coefficient.

Intercorrelating the variables derived from the Iowa Tests of Educational Development and Kuder General Interest Survey provided the coefficients to use as a basis for rejecting hypothesis Ho_5. Hypothesis Ho_5 stated that there would be no significant relationships found among the scores on the Iowa Tests of Educational Development and the scores on the Kuder General Interest Survey in the non-college preparatory curriculum group. This hypothesis was rejected because a coefficient of .17 for Reading Comprehension and Artistic was significant at the .05 level of confidence. The only other significant relationship found between the variables from these instruments was a coefficient of .18 for Mathematics and Computational. Most of the other coefficients clustered near zero. These coefficients are presented in Table CXLI.

TABLE CXXXVIII

INTERCORRELATION COEFFICIENTS OF SRA-PRIMARY MENTAL ABILITIES TESTS SCORES OF 178 STUDENTS IN A NON-COLLEGE PREPARATORY CURRICULUM

Variable	Verbal Meaning	Number Facility	Reasoning	Spatial Relations	PMA Total
Verbal Meaning	-	.28*	.48*	.10	.64*
Number Facility	.28*	-	.48*	.30*	.64*
Reasoning	.48*	.48*	-	.22*	.77*
Spatial Relations	.10	.30*	.22*	-	.69*
PMA Total	.64*	.64*	.77*	.68*	-

*Significant at or beyond the .05 level of confidence.

TABLE CXXXIX

INTERCORRELATION COEFFICIENTS OF KUDER GENERAL INTEREST SURVEY SCORES OF 178 STUDENTS IN A NON-COLLEGE PREPARATORY CURRICULUM

Variable	Outdoor	Mechanical	Computational	Scientific	Persuasive
Outdoor	-	.49*	-.32*	.02	.21*
Mechanical	.49*	-	-.35*	.31*	.06
Computational	-.32*	-.35*	-	-.20*	-.25*
Scientific	.02	.31*	-.20*	-	.31*
Persuasive	.21*	.06	-.25*	.31*	-
Artistic	-.28*	-.34*	.24*	.21*	.10
Literary	-.42*	-.47*	.44*	.05	-.14
Music	-.25*	-.34*	.44*	-.10	-.34*
Social Service	.01	.19*	-.09	.11	.18*
Clerical	-.02	-.14	.48*	-.40*	-.33*

TABLE CXXXIX (continued)

Variable	Artistic	Literary	Music	Social Service	Clerical
Outdoor	.28*	-.42*	-.25*	.01	-.02
Mechanical	-.34*	-.47*	-.34*	.20*	-.14
Computational	.24*	.44*	.44*	-.09	.48*
Scientific	.21*	-.05	-.10	.11	-.40*
Persuasive	.10	-.14	-.34*	.18*	-.33*
Artistic	-	.44*	.32*	-.03	-.06
Literary	.44*	-	.59*	-.16*	.23*
Music	.32*	.60*	-	-.08	.29*
Social Service	-.03	-.16	-.08	-	.11
Clerical	-.06	.23*	.29*	.11	-

*Significant at or beyond the .05 level of confidence.

TABLE CXL

INTERCORRELATION COEFFICIENTS OF IOWA TESTS OF EDUCATIONAL DEVELOPMENT AND SRA-PRIMARY MENTAL ABILITIES TESTS SCORES OF 178 STUDENTS IN A NON-COLLEGE PREPARATORY CURRICULUM

Variable	Verbal Meaning	Number Facility	Reasoning	Spatial Relations	PMA Total
Reading Comprehension	.36*	.31*	.43*	.24*	.47*
Vocabulary	.38*	.29*	.34*	.18*	.41*
Reading Total	.39*	.32*	.41*	.23*	.47*
Language Arts Usage	.35*	.36*	.39*	.15*	.42*
Spelling	.21*	.31*	.39*	.16*	.36*
Language Arts Total	.32*	.37*	.44*	.18*	.44*
Mathematics	.25*	.25*	.32*	.21*	.36*
Social Studies	.17*	.18*	.28*	.15*	.28*
Science	.18*	.16*	.27*	.23*	.31*
Use of Sources	.17*	.23*	.27*	.19*	.30*
Composite Total	.38*	.37*	.46*	.23*	.49*

*Significant at or beyond the .05 level of confidence.

TABLE CXLI

INTERCORRELATION COEFFICIENTS OF IOWA TESTS OF EDUCATIONAL DEVELOPMENT AND KUDER GENERAL INTEREST SURVEY SCORES OF 178 STUDENTS IN A NON-COLLEGE PREPARATORY CURRICULUM

Variable	Outdoor	Mechanical	Computational	Scientific	Persuasive
Reading Comprehension	-.05	-.06	.06	.03	.03
Vocabulary	-.05	-.03	.09	-.05	.02
Reading Total	-.05	-.05	.08	-.01	.03
Language Arts Usage	.03	.10	.02	.02	.11
Spelling	-.06	.01	.10	.05	-.12
Language Arts Total	-.01	.06	.07	.04	-.00
Mathematics	-.05	-.05	.18*	-.01	.01
Social Studies	-.03	-.06	.09	.04	.05
Science	-.01	.00	.11	.07	.02
Use of Sources	.05	.05	.09	-.03	.03
Composite Total	-.04	-.00	.10	.02	.02

TABLE CXLI (continued)

Variable	Artistic	Literary	Music	Social Service	Clerical
Reading Comprehension	.17*	.11	.06	.09	-.00
Vocabulary	.05	.02	-.02	.08	.05
Reading Total	.12	.07	.03	.09	.02
Language Arts Usage	.04	-.03	.09	.10	.01
Spelling	.12	.07	.04	.03	.05
Language Arts Total	.09	.02	-.03	.08	.04
Mathematics	.11	.04	.03	.06	.09
Social Studies	.14	.08	.02	.07	-.00
Science	.13	.09	.12	.07	-.03
Use of Sources	.14	.05	.06	.07	.07
Composite Total	.12	.05	.00	.09	.04

*Significant at or beyond the .05 level of confidence.

Hypothesis Ho_6 indicated that no significant relationship would be found among the scores of the SRA-Primary Mental Abilities Tests and the ratings on the Kuder General Interest Survey in the non-college preparatory curriculum group. Presented in Table CXLII are the coefficients upon which hypothesis Ho_6 was rejected. A coefficient of .20 for Scientific and Verbal Meaning was significant at the .01 level of confidence which resulted in the rejection of the hypothesis.

Three other coefficients were significant for the intercorrelated variables derived from mental ability and interest instruments. These coefficients were: (1) Persuasive and Verbal Meaning (-.17); (2) Artistic and Reasoning (.19); and, (3) Artistic and PMA Total (.18).

Presented in Table CXLIII are the eigenvalues and cumulative percent of variance for the variables derived from achievement, mental ability, and interest instruments. The cumulative percent of variance was used as a basis to accept hypothesis Ho_8.

Hypothesis Ho_8 indicated that sufficient factors would be found to account for at least seventy percent of the variance observed among the variables within the intercorrelation matrix computed from the results obtained from the standardized instruments administered to the non-college preparatory curriculum group. This hypothesis was accepted because four factors accounted for 77.56 percent of the variance among the variables.

Factor one accounted for 31.99 percent of the variance. Factors two, three, and four furnished explanation of 22.19, 14.08, and 9.20 percent of the variance, respectively.

Secondary Sample Factors

These data were analyzed by using techniques of factor analysis after the significance of the coefficients was determined. These procedures included the establishment of an unrotated factor matrix, an orthogonal factor matrix, and an oblique factor matrix.

Presented in Table CXLIV are five factors produced by an unrotated factor matrix. The factor loadings on the variables of PMA Total and Artistic prevented the achievement of simple structure. Principle one of simple structure indicates that each row of the factor matrix should have at least one loading close to zero. Factor loadings on PMA Total and Artistic did not approach zero.

TABLE CXLII

INTERCORRELATION COEFFICIENTS OF SRA-PRIMARY MENTAL ABILITIES TESTS AND KUDER GENERAL INTEREST SURVEY SCORES OF 178 STUDENTS IN A NON-COLLEGE PREPARATORY CURRICULUM

Variable	Verbal Meaning	Number Facility	Reasoning	Spatial Relations	PMA Total
Outdoor	.00	.01	-.05	-.11	-.07
Mechanical	.04	.14	-.02	.01	.04
Computational	-.12	.05	.04	.03	-.00
Scientific	.20*	.01	.09	-.03	-.10
Persuasive	-.17*	.02	.11	.04	.13
Artistic	.13	.04	.19*	.09	.18*
Literary	.09	-.06	.11	-.05	-.04
Music	.01	-.04	.04	.03	.03
Social Service	-.04	.09	.03	.01	.02
Clerical	-.10	.05	.00	-.12	-.08

*Significant at or beyond the .05 level of confidence.

TABLE CXLIII

EIGENVALUES AND CUMULATIVE PERCENT OF VARIANCE OF EXTRACTED FACTORS FROM ACHIEVEMENT, MENTAL ABILITY, AND INTEREST VARIABLES OF 178 STUDENTS IN A NON-COLLEGE PREPARATORY CURRICULUM

Factors	Eigenvalues	Cumulative Percent of Variance
1	8.48	31.99
2	2.77	54.28
3	1.75	68.36
4	1.14	77.56
5	0.72	83.36
6	0.53	87.66
7	0.46	91.36
8	0.34	94.10
9	0.31	96.61
10	0.20	98.19
11	0.17	99.55
12	0.05	99.97
13	0.01	99.99
14	0.00	0.00
15	0.00	0.00
16	0.00	0.00
17	0.00	0.00
18	0.00	0.00
19	0.00	0.00
20	0.00	0.00
21	0.00	0.00
22	0.00	0.00
23	0.00	0.00
24	0.00	0.00
25	0.00	0.00
26	0.00	0.00

TABLE CXLIV

UNROTATED FACTOR MATRIX OF ACHIEVEMENT, MENTAL ABILITY, AND INTEREST VARIABLES OF 178 STUDENTS IN A NON-COLLEGE PREPARATORY CURRICULUM

Variable	Factors				
	1	2	3	4	5
Reading Comprehension	-.92	-.04	-.09	.19	-.25
Vocabulary	-.87	.01	-.18	.01	-.19
Reading Total	-.95	-.02	-.14	.11	-.23
Language Arts Usage	-.79	.16	-.09	-.12	.33
Spelling	-.76	-.04	-.12	-.09	.31
Language Arts Total	-.89	.07	-.13	-.13	.41
Mathematics	-.69	-.06	-.10	-.00	-.05
Social Studies	-.76	-.04	-.22	.21	-.16
Science	-.71	-.04	-.14	.15	-.10
Use of Sources	-.68	-.01	-.16	.24	.02
Composite Total	-.90	.01	-.09	.00	.26
Verbal Meaning	-.42	.12	.40	.01	-.01
Number Facility	-.42	.12	.31	-.29	.01
Reasoning	-.50	.03	.36	-.09	.18
Spatial Relations	-.27	-.03	.23	-.08	-.08
PMA Total	-.65	.14	.87	-.32	=.18
Outdoor	.06	.51	-.18	-.14	-.05
Mechanical	.11	.64	-.09	-.17	.10
Computational	-.11	-.66	-.03	-.16	.05
Scientific	-.04	.30	.25	.43	.25
Persuasive	-.45	.40	.21	.36	.01
Artistic	-.17	-.38	.32	.37	.16
Literary	-.09	-.72	.20	.18	.12
Music	-.04	-.67	.11	-.00	.05
Social Service	-.08	.18	-.06	-.01	.02
Clerical	-.03	-.44	-.21	-.47	-.03

The five factors derived from the unrotated matrix were not named since simple structure was not achieved. An orthogonal rotation was attempted in an effort to achieve simple structure.

An orthogonal rotation of the factor matrix of achievement, mental ability, and interest variables produced five factors. This rotation of the matrix achieved simple structure. The factor loadings from this rotation are presented in Table CXLV. Principle one was satisfied because each row of the matrix had at least one loading close to zero. The requirement of principle two was met inasmuch as each column had as many variables with zero loadings as there were factors. Principle three was achieved due to loadings being high on one factor and low on another for each pair of factors. Principle four was satisfied because a large proportion of the variables had near zero loadings on any pair of factors. The requirement of principle five was met because only a small number of variables had high loadings on any pair of factors.

A second rotation was attempted in order to secure the highest factor loadings possible before naming the factors. This rotation permitted the axis to be changed from a right angle to an acute or an obtuse angle.

The oblique rotation produced only slightly different factor loadings from the orthogonal rotation. The five principles of simple structure were attained for the oblique rotation. The results of the oblique rotation are presented in Table CXLVI.

An attempt was made to name the five factors from the oblique factor matrix. Factors one, two, three, and five were named. Factor four was not named.

Factor 1. The loadings on factor one were highest on the following variables: (1) Reading Comprehension (-.97); (2) Reading Total (-.96); (3) Composite Total (-.86); (4) Social Studies (-.84); and, (5) Vocabulary (-.83). These variables were interpreted to represent the use of language. The total Social Studies score was represented by a series of scores that were duplicated in the Reading Total. Since these variables appeared to be related to reading skill, factor one was named reading ability.

Factor 2. Factor two was named fine arts. Three of the highest loadings were from the following variables: (1) Literary (-.77); (2) Music (-.70); and, (3) Artistic (-.56). A fourth loading was high on the variable termed Computational (-.59). An explanation of three high loadings on the arts

TABLE CXLV

ORTHOGONAL FACTOR MATRIX OF ACHIEVEMENT, MENTAL ABILITY, AND INTEREST VARIABLES OF 178 STUDENTS IN A NON-COLLEGE PREPARATORY CURRICULUM

Variable	Factors				
	1	2	3	4	5
Reading Comprehension	-.93	-.06	.26	.08	-.05
Vocabulary	-.82	.05	.22	-.09	.05
Reading Total	-.94	-.01	.26	-.00	-.01
Language Arts Usage	-.63	.08	.28	-.04	.66
Spelling	-.66	-.04	.22	.05	.28
Language Arts Total	-.74	.03	.28	.02	.55
Mathematics	-.67	-.05	.22	-.09	.05
Social Studies	-.84	-.06	.08	.03	-.04
Science	-.74	-.08	.13	.04	-.00
Use of Sources	-.68	-.05	.14	-.05	.14
Composite Total	-.82	-.02	.29	-.01	.19
Verbal Meaning	-.20	-.06	.49	.19	.11
Number Facility	-.19	.05	.55	-.06	.11
Reasoning	-.28	-.09	.53	.06	.10
Spatial Relations	-.15	-.00	.34	.01	-.03
PMA Total	-.21	-.03	.13	.06	-.03
Outdoor	-.01	.39	-.05	.02	-.00
Mechanical	.03	.45	.67	.20	.05
Computational	-.09	-.55	-.01	-.42	-.01
Scientific	.01	-.05	.06	.65	.02
Persuasive	-.01	.15	.09	.38	.03
Artistic	-.10	-.56	.11	.25	-.01
Literary	-.04	-.77	.00	-.06	.04
Music	-.02	-.69	.01	-.17	-.05
Social Service	-.07	.10	.02	.03	.01
Clerical	-.02	-.26	-.04	-.64	.04

TABLE CXLVI

OBLIQUE FACTOR MATRIX OF ACHIEVEMENT, MENTAL ABILITY, AND INTEREST VARIABLES OF 178 STUDENTS IN A NON-COLLEGE PREPARATORY CURRICULUM

Variable	Factors				
	1	2	3	4	5
Reading Comprehension	-.97	-.22	.48	-.11	.34
Vocabulary	-.83	-.12	.42	-.20	.45
Reading Total	-.96	-.18	.48	-.16	.42
Language Arts Usage	-.68	-.05	.45	-.13	.86
Spelling	-.68	-.18	.39	-.15	.49
Language Arts Total	-.77	-.13	.48	-.16	.77
Mathematics	-.70	-.18	.36	-.26	.29
Social Studies	-.84	-.18	.28	-.18	.23
Science	-.76	-.20	.30	-.14	.26
Use of Sources	-.70	-.16	.30	-.22	.35
Composite Total	-.86	-.18	.49	-.18	.52
Verbal Meaning	-.29	-.12	.56	.21	.39
Number Facility	-.29	-.04	.57	-.04	.37
Reasoning	-.39	-.19	.59	.03	.37
Spatial Relations	-.22	-.06	.36	.01	.15
PMA Total	-.43	-.18	.14	.12	.48
Outdoor	.05	.43	-.06	.11	.13
Mechanical	.06	.48	.06	.30	.23
Computational	-.13	-.59	-.00	-.56	-.18
Scientific	-.21	.00	.11	.58	.09
Persuasive	-.02	.19	.13	.40	.14
Artistic	-.17	-.56	.17	.07	-.07
Literary	-.10	-.77	.04	-.22	-.15
Music	-.07	-.70	.02	-.30	-.22
Social Studies	-.08	.09	.04	.02	.07
Clerical	-.03	-.30	-.07	-.66	-.08

variables and one high loading on the Computational variable was not attempted.

Factor 3. Numerical values on factor three were highest on the variables named below: (1) Reasoning (.59); (2) Number Facility (.57); and, (3) Verbal Meaning (.56). This factor was named mental ability since the factor loadings were highest on the variables derived from the SRA-Primary Mental Abilities Tests.

Factor 4. Factor four was loaded highest on the following variables: (1) Clerical (-.66); (2) Scientific (.58); and, (3) Computational (-.56). These three variables were from the Kuder General Interest Survey. No attempt was made to name this factor.

Factor 5. The loadings on factor five were highest for the variables of Language Arts Usage and Language Arts Total. Language Arts Usage had a factor loading of .86, and the factor loading of the Language Arts Total variable was .77. The high loadings of the language arts related variables determined the name of this factor as language arts.

CRITERION SAMPLE DATA

To determine the significant of the correlation coefficients, fiduciary limits were established at the .05 and .01 levels of confidence, a coefficient value of .20 was necessary. A coefficient was termed significant at the .01 level of confidence when the coefficient value was .26 or larger.

Criterion Sample Intercorrelations

Coefficients from the Iowa Tests of Educational Development and SRA-Primary Mental Abilities Tests are presented in Table CXLVII. All of the coefficients produced by intercorrelating the variables of these instruments were significant at the .01 level of confidence. A coefficient of .78 was produced for the following variables: (1) Vocabulary and Verbal Meaning; (2) Reading Total and Verbal Meaning; and, (3) Composite Total and Verbal Meaning. The coefficient .78 represented the largest amount of correlation between the variables.

A coefficient of .19 represented the least amount of correlation between the variables. This coefficient was established by correlating Spelling and Number Facility.

TABLE CXLVII

INTERCORRELATION COEFFICIENTS OF IOWA TESTS OF EDUCATIONAL DEVELOPMENT AND SRA-PRIMARY MENTAL ABILITIES TESTS SCORES OF 100 SECONDARY STUDENTS NOT IN A NON-COLLEGE PREPARATORY CURRICULUM

Variable	Verbal Meaning	Number Facility	Reasoning	Spatial Relations	PMA Total
Reading Comprehension	.70*	.35*	.44*	.30*	.59*
Vocabulary	.78*	.40*	.46*	.41*	.68*
Reading Total	.78*	.39*	.47*	.37*	.67*
Language Arts Usage	.67*	.36*	.42*	.39*	.62*
Spelling	.67*	.19	.36*	.22*	.49*
Language Arts Total	.75*	.31*	.44*	.34*	.62*
Mathematics	.47*	.30*	.46*	.31*	.50*
Social Studies	.72*	.26*	.38*	.35*	.59*
Science	.64*	.26*	.41*	.39*	.59*
Use of Sources	.64*	.26*	.48*	.39*	.61*
Composite Total	.78*	.37*	.50*	.39*	.68*

*Significant at or beyond the .05 level of confidence.

Presented in Table CXLVIII are the intercorrelation coefficients of the variables from the Iowa Tests of Educational Development and Kuder General Interest Survey. These coefficients ranged from a low of .00 to a high of .30. Fifteen of these coefficients were significant at the .05 level of confidence. A majority of the significant coefficients were the results of correlating the Literary variable with an achievement test variable. The highest correlation was the result of correlating Science with Scientific.

One coefficient was significant at the .01 level of confidence when mental ability variables were correlated with interest variables. A coefficient of .27 was produced when the Reasoning variable was correlated with the Literary variable. Five coefficients were significant at the .05 level of confidence in the same matrix. These coefficients are presented in Table CXLIX.

Presented in Table CL are the eigenvalues and cumulative percent of variance accounted for among the variables of achievement, interest, and mental ability. For secondary students not enrolled in a non-college preparatory curriculum, factor one accounted for 45.58 percent of the variance among the twenty-six variables. Factor two explained 10.15 percent of the variance. Factors three, four, and five accounted for 21.89 percent of the variance among the variables for the criterion sample.

An unrotated factor matrix was structured for the criterion sample. Simple structure was not achieved by this representation of the variables. The first principle of simple structure was not satisfied due to each row of the matrix not having at least one loading close to zero. These loadings are presented in Table CLI.

The two variables with loadings that did not approach zero were Number Facility and Space Relations. An orthogonal rotation was attempted in an effort to satisfy the principles of simple structure.

Presented in Table CLII are the factor loadings of an orthogonal factor matrix resulting from the scores obtained from a group of students not enrolled in a non-college preparatory curriculum. The principles of simple structure were satisfied by this representation of the factor loadings. Principle one was achieved since each row of the matrix had one loading close to zero. The requirement was met for principle two because there were as many variables with near zero loadings in each column as there were factors. Principle three was satisfied because the loadings on any pair of factors were

TABLE CXLVIII

INTERCORRELATION COEFFICIENTS OF IOWA TESTS OF EDUCATIONAL DEVELOPMENT AND KUDER GENERAL INTEREST SURVEY SCORES OF 100 SECONDARY STUDENTS NOT IN A NON-COLLEGE PREPARATORY CURRICULUM

Variable	Outdoor	Mechanical	Computational	Scientific	Persuasive
Reading Comprehension	-.20*	-.04	-.09	.07	.16
Vocabulary	-.08	-.03	-.19	.13	.17
Reading Total	-.15	-.04	-.14	.11	.17
Language Arts Usage	-.13	-.18	-.03	-.13	.10
Spelling	-.08	-.14	-.24	-.01	.09
Language Arts Total	-.12	-.18	-.14	-.08	.11
Mathematics	-.12	.09	.19	.16	.25*
Social Studies	-.07	.09	-.02	.15	.21*
Science	-.17	.14	-.11	.30	.19
Use of Sources	-.14	-.04	-.01	.07	.19
Composite Total	-.14	-.07	-.10	.04	.18

TABLE CXLVIII (continued)

Variable	Artistic	Literary	Music	Social Service	Clerical
Reading Comprehension	.01	.23*	-.04	.00	-.08
Vocabulary	-.02	.26*	-.09	-.01	-.15
Reading Total	-.00	.26*	-.07	-.00	-.12
Language Arts Usage	.02	.20*	-.10	.08	.16
Spelling	.09	.25*	-.03	.07	-.05
Language Arts Total	.06	.25*	-.07	.09	.06
Mathematics	-.03	.03	.08	-.25*	-.26*
Social Studies	-.02	.05	-.15	-.08	-.06
Science	.01	.08	-.08	-.09	-.22*
Use of Sources	.04	.18	-.10	-.06	-.14
Composite Total	.02	.24*	-.04	-.02	-.08

*Significant at or beyond the .05 level of confidence.

TABLE CXLIX

INTERCORRELATION COEFFICIENTS OF SRA-PRIMARY MENTAL ABILITIES TESTS AND KUDER GENERAL INTEREST SURVEY SCORES OF 100 SECONDARY STUDENTS NOT IN A NON-COLLEGE PREPARATORY CURRICULUM

Variable	Verbal Meaning	Number Facility	Reasoning	Spatial Relations	PMA Total
Outdoor	-.11	-.19	-.12	-.05	-.13
Mechanical	-.16	.07	-.08	.05	-.05
Computational	-.14	.04	.15	.12	.06
Scientific	.10	-.03	-.00	.01	.03
Persuasive	.21*	.24*	.15	.03	.18
Artistic	.02	-.16	-.03	.18	.06
Literary	.25*	.20*	.27*	-.07	.18
Music	-.07	-.04	-.08	-.16	-.13
Social Service	-.08	.02	.05	-.04	-.03
Clerical	-.05	-.14	-.21*	-.07	-.14

*Significant at or beyond the .05 level of confidence.

TABLE CL

EIGENVALUES AND CUMULATIVE PERCENT OF VARIANCE OF EXTRACTED FACTORS FROM ACHIEVEMENT, MENTAL ABILITY, AND INTEREST VARIABLES OF 100 SECONDARY STUDENTS NOT IN A NON-COLLEGE PREPARATORY CURRICULUM

Factors	Eigenvalues	Cumulative Percent of Variance
1	10.59	45.58
2	2.17	55.73
3	1.72	63.78
4	1.59	71.25
5	1.36	77.62
6	1.01	82.36
7	0.71	85.70
8	0.66	88.77
9	0.50	91.12
10	0.49	93.40
11	0.40	95.29
12	0.27	96.53
13	0.21	97.54
14	0.20	98.51
15	0.17	99.29
16	0.08	99.66
17	0.04	99.83
18	0.03	99.99
19	0.00	99.99
20	0.00	0.00
21	0.00	0.00
22	0.00	0.00
23	0.00	0.00
24	0.00	0.00
25	0.00	0.00
26	0.00	0.00

TABLE CLI

UNROTATED FACTOR MATRIX OF ACHIEVEMENT, MENTAL ABILITY, AND INTEREST VARIABLES OF 100 SECONDARY STUDENTS NOT IN A NON-COLLEGE PREPARATORY CURRICULUM

Variable	Factors				
	1	2	3	4	5
Reading Comprehension	-.91	-.04	-.09	.04	-.20
Vocabulary	-.90	.05	-.01	-.02	-.22
Reading Total	-.95	.00	-.06	.01	-.22
Language Arts Usage	-.77	-.31	.18	-.05	.02
Spelling	-.84	-.21	-.19	-.01	-.32
Language Arts Total	-.90	-.29	-.00	-.03	-.17
Mathematics	-.66	.32	-.28	.05	.06
Social Studies	-.81	.17	-.06	-.12	-.17
Science	-.76	.25	-.04	-.06	-.16
Use of Sources	-.83	.04	.01	-.03	-.11
Composite Total	-.11	-.22	-.78	-.06	.79
Verbal Meaning	-.82	-.01	.12	.04	-.11
Number Facility	-.44	.13	.33	.16	.18
Reasoning	-.58	.11	.43	.07	.22
Spatial Relations	-.49	.15	.50	-.30	.26
PMA Total	-.79	.13	.51	-.08	.21
Outdoor	.17	.09	-.14	-.53	-.11
Mechanical	.06	.62	-.16	-.33	-.03
Computational	.08	.20	.23	.02	.38
Scientific	-.08	.62	-.21	.82	.10
Persuasive	-.22	.27	.02	.41	.06
Artistic	-.01	-.30	.08	-.42	-.02
Literary	-.25	-.25	.09	.61	-.02
Music	.07	.03	-.12	.54	-.02
Social Service	.03	-.55	.11	-.07	-.11
Clerical	.12	-.53	.12	-.13	.12

TABLE CLII

ORTHOGONAL FACTOR MATRIX OF ACHIEVEMENT, MENTAL ABILITY, AND INTEREST VARIABLES OF 100 SECONDARY STUDENTS NOT IN A NON-COLLEGE PREPARATORY CURRICULUM

Variable	Factors				
	1	2	3	4	5
Reading Comprehension	-.94	-.07	.12	.09	.09
Vocabulary	-.86	.12	.31	.01	.08
Reading Total	-.95	.03	.23	.05	.09
Language Arts Usage	-.65	-.15	.33	.03	.10
Spelling	-.92	-.15	-.03	.09	.08
Language Arts Total	-.87	-.16	.17	.07	.10
Mathematics	-.62	.04	.20	.06	.10
Social Studies	-.83	.13	.20	-.11	.06
Science	-.74	.24	.26	-.01	.05
Use of Sources	-.81	-.03	.22	.04	.07
Composite Total	-.84	-.03	.20	.06	.13
Verbal Meaning	-.72	.12	.39	.11	.06
Number Facility	-.23	-.11	.55	.07	.05
Reasoning	-.36	-.12	.66	.10	.03
Spatial Relations	-.24	.09	.75	-.11	.03
PMA Total	-.51	.03	.85	.03	.05
Outdoor	.11	.03	-.11	-.63	-.00
Mechanical	.04	.14	.00	-.54	-.01
Computational	.13	.09	.12	-.01	-.01
Scientific	-.10	.74	-.05	-.05	-.01
Persuasive	-.14	-.15	.13	.24	.01
Artistic	-.03	-.18	.03	.08	.00
Literary	-.17	-.18	.11	.57	.02
Music	.09	.15	-.14	.57	.02
Social Service	.01	-.29	.05	.02	-.00
Clerical	.06	-.25	-.14	.02	-.00

contributed by different variables. Principle four was achieved due to negligible loadings occurring on any pair of factors. The requirement for principle five was met since every pair of factors had only a small number of variables with appreciable loadings.

An oblique rotation was attempted in an effort to acquire the loadings that would facilitate naming the factors. This rotation permitted the angles of the factor axes to become obtuse or acute. The loadings for this rotation are presented in Table CLIII.

Three of the five factors established by the oblique factor matrix were named. Efforts were expended in an attempt to name the remaining two factors without success.

Factor 1. Factor one was named language facility. The loadings on factor one were largest for the following variables: (1) Composite Total (-.98); (2) Reading Total (-.98); (3) Reading Comprehension (-.95); (4) Vocabulary (-92); (5) Spelling (-.89); and (6) Language Arts Total (-.89). The relationships formed by these variables appeared to share the language facility construct.

Factor 2. Factor two was not named. A common element did not appear between the four variables with largest factor loadings. The variables with the largest factor loadings were: (1) Scientific (.73); (2) Social Service (-.37); (3) Literary (-.34); and, (4) Mechanical (.30). Inquiry appeared to be a proper name for the large factor loading on Scientific, but the Literary and Social Service variables did not seem to share a common construct with that name.

Factor 3. Factor three was named mental ability since the variables with the largest factor loadings were derived from the SRA-Primary Mental Abilities Tests. The largest factor loadings for this factor occurred on the following variables: (1) PMA Total (.98); (2) Spatial Relations (.76); (3) Reasoning (.73); and, (4) Verbal Meaning (.68).

Factor 4. A loading of .64 on the variable termed Literary and a loading of .53 on the Music variable indicated that an appropriate name for this factor might be art ability. However, a loading of -.63 on the Outdoor variable and a loading of -.57 on the variable termed Mechanical appeared to negate art ability as an appropriate name. A name was not assigned to this factor.

Factor 5. Factor five had loadings of small numerical value. The loadings on factor five were largest for the variables termed Language Arts Usage and Language Arts Total.

TABLE CLIII

OBLIQUE FACTOR MATRIX OF ACHIEVEMENT, MENTAL ABILITY, AND INTEREST VARIABLES OF 100 SECONDARY STUDENTS NOT IN A NON-COLLEGE PREPARATORY CURRICULUM

Variable	Factors				
	1	2	3	4	5
Reading Comprehension	-.95	-.06	.51	.21	.14
Vocabulary	-.92	.10	.67	.11	.12
Reading Total	-.98	.02	.62	.17	.14
Language Arts Usage	-.70	.11	.55	.18	.17
Spelling	-.89	-.13	.35	.20	.13
Language Arts Total	-.89	-.18	.51	.21	.17
Mathematics	-.67	-.07	.45	.12	.14
Social Studies	-.85	.17	.56	-.03	.09
Science	-.78	.25	.57	.04	.08
Use of Sources	-.84	-.02	.55	.13	.12
Composite Total	-.98	-.07	.59	-19	.14
Verbal Meaning	-.80	.07	.68	.20	.11
Number Facility	-.36	-.19	.61	.15	.07
Reasoning	-.50	-.21	.73	.18	.07
Spatial Relations	-.38	.06	.76	-.09	.06
PMA Total	-.69	-.06	.98	.11	.10
Outdoor	.16	.14	-.17	-.63	-.01
Mechanical	.03	.30	.03	-.57	-.03
Computational	.11	.08	.07	-.00	-.00
Scientific	-.10	.73	.04	-.10	-.03
Persuasive	-.22	-.16	.23	.28	.01
Artistic	-.01	-.10	.00	-.13	.01
Literary	-.22	-.34	.16	.64	.04
Music	.08	.06	-.18	.53	.02
Social Service	.03	-.37	-.01	.06	-.00
Clerical	.12	-.24	-.14	.04	.01

Both of these variables had factor loadings of .17. The named assigned to factor five was language arts.

SUMMARY

Intercorrelation coefficients were presented from three groups of data acquired from students enrolled in a middle school program, secondary students enrolled in a non-college preparatory curriculum, and secondary students not enrolled in a non-college preparatory curriculum. Many of these coefficients were significant at the .01 level of confidence.

An account was made of the variance among the variables using eigenvalues and cumulative percent of variance. This procedure provided for the variance among the variables in the three groups of data.

The data from each sample were analyzed by factor analysis in an attempt to provide a parsimonious explanation of the constructs underlying the variables. Three factor matrices were structured in order to achieve simple structure and secure factor loadings that would facilitate the naming of the factors.

BODY OF THE REPORT

RESEARCH AND DEVELOPMENT IN CAREER EDUCATION

PROJECT #V261029L

EVALUATION

*(SUB-SECTION)

EVALUATION REPORT ON THE PROGRAM RESEARCH AND DEVELOPMENT PROJECT IN CAREER EDUCATION

Submitted to:

Calcasieu Parish School Board
Lake Charles, Louisiana

Submitted by:

Educational Consultant Associates
Lake Charles, Louisiana

Thomas E. Jordan, Ed.D.
and
Robert H. Pittman, Ed.D

SUMMARY

Calcasieu Parish School Board program Research and Development Project In Career Education was based on the principle that career education should permeate all levels of education and should become a part of 'every students' curricula from the moment he enters school until he exits. The fundamental concept of career education is that all types of educational experiences, curriculum, instruction and counseling should involve preparation for economic independence, personal fulfillment, and an appreciation for the dignity of work.

The program had three main goals:

1. Providing information and creating an awareness of Career Education at the elementary level, K-5
2. Providing information, self-evaluation, and exploration at the middle school level, grades 6-8 and
3. Exploration and preparation at the senior high level.

Eighteen objectives were established to provide means of measurement of accomplishment of the above. Five pilot schools were selected to participate in the project; one (1) elementary school with approximately 500 students, three (3) middle schools with about 1600 students enrolled, and one (1) high school with about 1500 students.

Six (6) graduate fellows were secured to work in the program; one (1) as a research fellow served the overall project and performed the research concerning establishing a model to predict the career choices of middle school students upon entering high school; one (1) graduate fellow was assigned to each of the pilot schools as a graduate counselor. These graduate fellows conducted organization and information meetings with the respective faculties of the pilot schools, collected data on students, set up and maintained career education centers in each of the five schools participating in the project.

The evaluation was in terms of the stated objectives of the program as measured by the activity reports submitted monthly by the graduate fellows, test results, and the results of a pre and post questionnaire.
The results of the evaluation indicated that all of the stated objectives of the project were met except the one dealing with establishing a model for predicting career choices of the middle school students upon entering high school.

Recommendations resulting from the findings of the study were:

1. Further study should be conducted in the pilot schools.

2. The program in Career Education should be extended to other schools in Calcasieu Parish.

3. Special effort should be made to maintain the homogenious qualities that now exist between the students in academics and the trade and industry areas. Care should be taken to avoid developing a track system of curriculum.

THE LOCALE

Population Patterns.

The population of Calcasieu Parish is approximately 150,000. The estimated population of Louisiana is 3,700,000 with about thirty-seven (37) per cent of the people living in rural areas and the remaining sixty three (63) per cent residing in urban centers. The Calcasieu Parish rural/urban distribution of population consists of 8 per cent rural farm, 21 per cent rural non-farm, and 40 per cent central city, and 31 per cent other urban. The Research and Development Project in Career Education was confined to five public schools, all located within the city limits of the city of Lake Charles with an estimated population of 80,000. Both the city of Lake Charles and the Parish of Calcasieu have experienced a small gain in population during the 1960's and the projection is for continued gain of from 5 to 8 per cent during the next 10 year period.

Economic Patterns.

The occupations of the locale are many and varied. The major occupations are centered around the oil industry. both from production and processing. During the past years large industrial processing and manufacturing plants have developed in the immediate area providing many occupations for the people in the area. Farm related occupations are major contributors to the economy of the locale. Harbor and shipping provide considerable employment for the area residents.

As of June, 1973, the unemployment rate for Calcasieu Parish was 10.4 which was well above the national average of 5.4 and the 7.8 average for the state of Louisiana. As of the end of March, 1973, the number of families receiving welfare assistance in Calcasieu Parish was 12,008 people involving 6108 grants.

THE SCHOOL SYSTEM

Organization.

The Calcasieu Parish School System is composed of 67 public schools and 10 non public schools with a total enrollment of approximately 40,000 students in grades K-12. The public school system is administered by a parish wide central administrative staff headed by a professional superintendent selected by a school board of 15 members elected by popular vote of the registered voters of the parish.

Financial Status of the School System.

During the period 1960-1969 Calcasieu Parish School Board successfully proposed and the people voted $22,977,000 in bond issues for building school facilities for the various school communities of the parish. There are at this time two comprehensive high schools in the parish offering complete programs in Career Education for the high school students. A sales tax passed by popular vote enables the school system to pay the teaching personnel well above the minimum salary provided by the state foundation program. The operation budget for the school session of 1974 is approximately thirty (30) million dollars.

SPECIAL FACTORS

Needs Assessment.

The State Department of Education has issued numerous statements concerning the vocational needs of the school population of Louisiana. Approximately 85 per cent of the students do not attend colleges or universities. Most of this 85% do not have any saleable skills upon leaving school. The students of Calcasieu Parish Schools have about the same needs in this respect as the students of the other sections of the state. Specific needs in Career

Education indicate great need for awareness of job opportunities, job requirements, and job skills necessary for all students to possess some saleable skill upon leaving school.

Historical Background.

There is a university and a vocational-technical school in the city of Lake Charles both for the purpose of furthering the education of the high school graduate. The administrators of the Calcasieu Parish School System were concerned with the lack of educational opportunities for all those students not intending to attend universities and those that failed to complete high school. The curriculums of most of the schools were geared to college preparatory programs. These administrators assumed the initiative in attempting to develop a cooperative Career Education program involving the public schools of Calcasieu Parish, McNeese State University, and Sowela Training Institute. Since little has been done in this respect, it was decided to attempt to secure a grant to establish a pilot project to explore the possibility of developing and initiating Career Education in the schools of Calcasieu Parish. A proposal was developed and submitted. In due time a grant award of $104,021 was made to Calcasieu Parish School Board from the Bureau of Adult, Vocational, and

Technical Education, Office of Education, U. S. Department of Health, Education and Welfare.

THE PROGRAM

Scope of Program.

The purpose of the Research and Development Project in Career Education was to explore and develop, through the means of a Pilot Program, a workable Career Education Program.

This program involved three levels of development, as follows:

(1) Providing information and creating an awareness of Career Education at the elementary level, K-5

(2) Providing information, self-evaluation, and exploration at the middle school level, grades 6-8 and

(3) Exploration and preparation at the senior high level.

Five schools were selected to participate in the pilot program; one (1) elementary school with approximately five hundred (500) students enrolled in grades K-5; three middle schools with a total student enrollment of approximately sixteen hundred (1600) in grades 6-8; and one high school serving approximately fifteen hundred (1500) students in grades 9-12.

PERSONNEL

The Calcasieu Parish School Board employed Aubrey Derouen as project director and placement officer in March, 1972. His duties included planning, implementing and conducting the administrative affairs of the project. During the summer of 1972 the Calcasieu Project Administrator and Director in conjunction with officials from McNeese State University selected the six graduate fellows to assist with the program. In April of 1972 a full time secretary was employed to fulfill the clerical duties of the program.

PROCEDURES

Organizational Details.

The Research and Development Project in Career Education was funded for the period January 1, 1972 - June 30, 1973. Calcasieu Parish requested an amendment to paragraph 6 of page 4 of the original project to extend the final report from June 30, 1972 to August 31, 1973. This report is an evaluation of the pilot program during the above period of time.

Calcasieu Parish School Board selected a director and placement official for the project March 16, 1972. Meetings were held with members of the McNeese State University faculty and the selection and employment of the six (6) graduate fellows were discussed. Five schools were selected to participate in the project as follows.

One (1) elementary Barbe Elementary
Three (3) middle schools LaGrange
Reynaud
S. J. Welsh
One (1) senior high school - Barbe

There was a total of approximately 3600 students enrolled in these five schools. One graduate fellow was assigned to each of the above schools and one graduate fellow was assigned as a research fellow for the overall project operating out of the Central Office.

The graduate fellows assigned to the above five schools worked with the teachers and principal in setting up Career Education Centers in each of the schools.

A Research Evaluation Design was prepared which encompassed a continuous evaluation of the program.

The design contained a description of the evaluation activities shown on the attached PERT network summary for the Research and Development Project. The activities as delineated on the summary included the following.

1. Assessment of appropriateness of project objectives.

2. Structure of evaluation instruments.

3. On-site visitation.

4. Data collection.
5. Analysis of data.
6. Writing of evaluation report.

The accomplishment of the tasks under each activity was oriented toward the establishment of a closed feedback loop system which allowed project personnel to make use of the evaluation process in decision making procedures related to project operation.

Steps involved in the above listed activities were as follows:

Activity 1 - Assessment of appropriateness of project objectives.

(a) Review goals, developmental, and behavioral objectives with project personnel.

(b) Present and discuss research evaluation model.

(c) Cooperatively modify evaluation model and project model to obtain accurate reflection of purpose.

Activity 2 - Structure of evaluation instruments.

(a) Develop quantifying instruments which will concentrate on achieving measurement of the degree and extent of activities related to program operation, administration, and services.

(b) Develop a means of comparing student behaviors on pre and post observation basis.

(c) Assist in selection of standardized measurement devices to be used in research component of project.

Activity 3 - On-site visitation.

(a) Confer with project personnel on an ongoing basis to determine the extent to which project components have been implemented.

(b) Conduct periodic on-site observations of project activities including the interviewing of project personnel and participating students.

Activity 4 - Data collection

(a) Collect and compile periodic report type information for utilization in project operation.

(b) Supervise administration of appropriate instruments and assist in quantification of data analysis.

Activity 5 - Analysis of data.

(a) Compile and compare data related to achievement of project objectives gathered through use of non-standardized instruments.

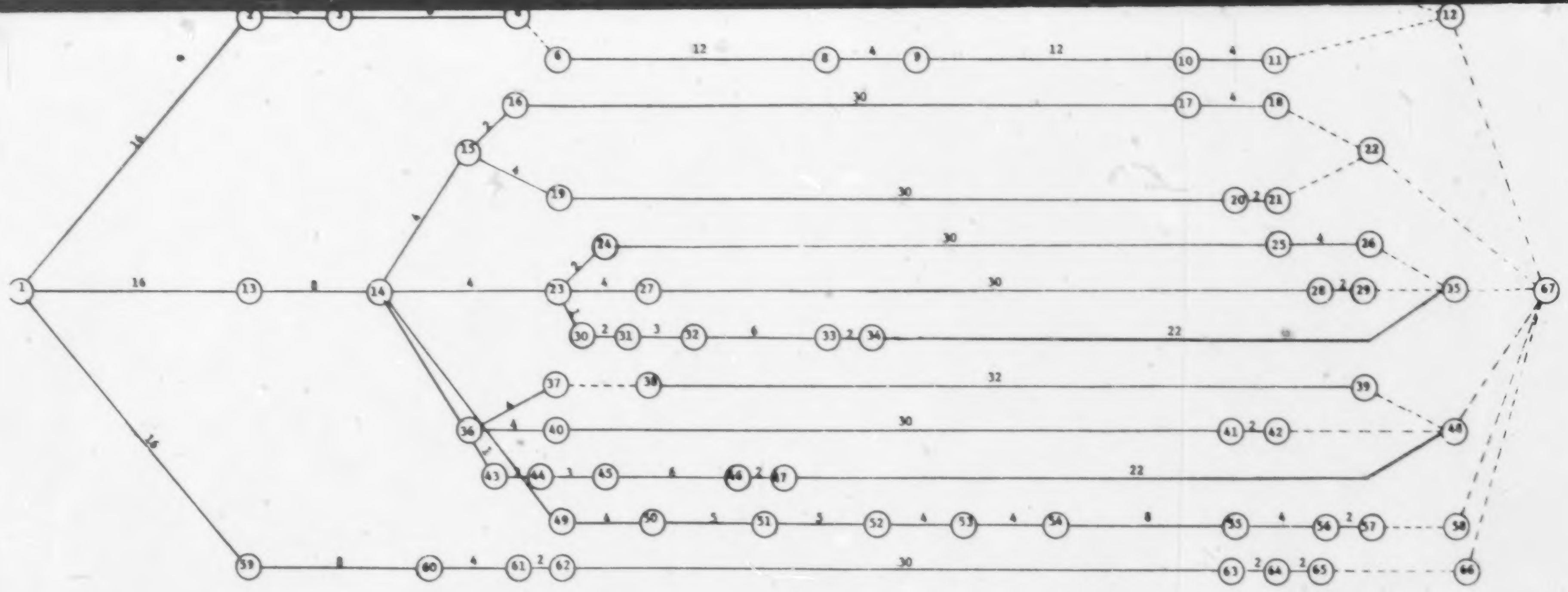
(b) Supervise the application of and assist in the interpretation of factor analytical design which will be applied to the standardized instrument data generated by the research component of the project.

(c) Assist in preparation of prediction formula expected from the application of factor analysis and multiple regression techniques to standardized instrument data.

Activity 6 - Writing of evaluation report.

(a) Prepare tables and text for evaluation report.

(b) Prepare final draft of report for duplication and dissemination.



1. Begin Project
2. Begin Placement Component Activities
3. Complete Listing of Industrial Opportunities
4. Complete Student Employment Applications
5. Begin Placement Operation for Exiting Students
6. Begin Preparation of Graduating Student Interview Schedules
7. Complete Operation of Exiting Student Placement
8. Complete Graduating Students Interview Schedules
9. Begin Graduating Students Interviews
10. Complete Graduating Students Interviews
11. Complete Follow-up of Placement Services
12. Complete Placement Component Activities
13. Begin Graduate Counseling Fellowships Component
14. Complete Project Objective Statements and Material Selection
15. Begin Elementary Counseling Graduate Fellowship Activities
16. Begin Inservice Meetings with Grade Level Committee (Elementary)
17. Complete Inservice Meetings with Grade Level Committee (Elementary)
18. Complete Follow-up of Inservice Meetings (Elementary)
19. Begin Group and Individual Counseling Sessions (Elementary)
20. Complete Group and Individual Counseling Sessions (Elementary)
21. Complete Follow-up of Group and Individual Counseling Sessions (Elementary)
22. Complete Elementary Counseling Graduate Fellowship Activities
23. Begin Middle School Counseling Graduate Fellowship Activities
24. Begin Subject Area Inservice Meetings (Middle School)
25. Complete Subject Area Inservice Meetings (Middle School)
26. Complete Follow-up of Inservice Meetings (Middle School)
27. Begin Group and Individual Counseling Sessions (Middle School)
28. Complete Group and Individual Counseling Sessions (Middle School)
29. Complete Follow-up of Group and Individual Counseling Sessions (Middle School)
30. Begin Student Name Master List for Sample Collection
31. Complete Student Name Master List
32. Complete Administration of Testing Program
33. Begin Recording of Test Results
34. Complete Recording of Test Results
35. Complete Middle School Counseling Graduate Fellowship Activities
36. Begin High School Counseling Graduate Fellowship Activities
37. Complete Student Employment Applications for Barbe High School
38. Begin Placement Operation for Exiting Barbe High School Students
39. Complete Placement Operation for Exiting Barbe High School Students
40. Begin Group and Individual Counseling Sessions (High School)
41. Complete Group and Individual Counseling Sessions (High School)
42. Complete Follow up of Group and Individual Counseling Sessions (High School)
43. Begin Student Name Master List for Sample Collection
44. Complete Student Name Master List
45. Complete Administration of Testing Program
46. Begin Recording of Test Results
47. Complete Recording of Test Results
48. Complete High School Counseling Graduate Fellowship Activities
49. Begin Research Graduate Fellowship Activities
50. Complete Research Design
51. Complete Assembly of Master Name List and Supervision of Testing Program
52. Complete Sample Selection and Data Collection
53. Complete Data Tabulation and Treatment
54. Complete Analysis of Data
55. Complete Preliminary Draft of Research Report
56. Complete Final Draft of Research Report
57. Duplicate Research Report for Dissemination
58. Complete Research Graduate Fellowship Activities
59. Begin Evaluation Activities
60. Complete Assessment of Appropriateness of Project Objectives
61. Complete Structure of Evaluation Instruments
62. Begin on Site Visitations and Data Collection Procedures
63. Complete on Site Visitations and Data Collection
64. Complete Data Analysis
65. Complete Evaluation Report
66. Complete Evaluation Activities
67. Complete Project

In-Service Training.

In-service training workshops were planned and held in August 1972 for the individual faculties and administrators of the participating schools. On August 17-18, 1972 a state conference was conducted in Baton Rouge dealing with "New Directions In Career Education," "Community Affairs," "Educational Accountability," and the Role of the Supervisor related to each. This conference was attended by the Project Administrator and his project staff. In addition to the above the Calcasieu Parish career education staff attended a three (3) day career education workshop in Baton Rouge September 20, 21, and 22. This workshop was for the purpose of sharing ideas, discussing problems and possible solutions for the on-going programs in the state. Several one day meetings were held throughout the year with invited speakers to present and discuss developments in Career Education. These meetings were attended by the teachers, principals, and graduate fellows of the five (5) participating schools. See Quarterly Reports for complete details of in-service training which was a continuous activity of this project.

Activities.

The Research and Development Project in Career Education was based on the written philosophy of the

Calcasieu Parish School System concerning Career Education which states in part---"Career education appears to be an agent for educational reform. In a definitive form, career education is based on the principle that incorporates complete and meaningful experiences about the world of work. Career education as a total concept should permeate all levels of education and should become a part of a students curricula from the moment he enters school until he exits. The fundamental concept of career education is that all types of educational experiences, curriculum, instruction and counseling should involve preparation for economic independence, personal fulfillment, and an appreciation for the dignity of work.

All education is career education, or should be, and the universal goal of America or education should be this; that every young person completing grade 12 or exiting prior to that point, be ready to enter higher education or to enter useful and rewarding life.

In the Calcasieu Parish Career Education Pilot Program the Career education program will mean creating awareness of orientation and information at the elementary level K-5; information, self-evaluation, and exploration at the middle school level, grades 6-8; and exploration and preparation at the senior high level.

As stated previously career education centers were established in each of the participating schools. These centers were provided career education materials appropriate to the type of school involved. The graduate fellow assisted the classroom teacher in developing teaching units centered around career education. A typical example was a unit prepared for one of the elementary grade groups of children. A field trip was planned in cooperation with a commercial fisherman. The children and some of the parents were transported to the private dock site. Here they were told about the job possibilities involved in fishing, their questions were answered and they all went aboard and proceeded to a fishing location. The youngsters asked questions freely; all were provided crabing equipment and all caught some crabs and some fish. Upon returning the boat crews prepared the fish and crabs for lunch for the teacher, parents, and children. Pictures were carefully taken for a complete record of the experiences. Upon returning to the classroom the students were able to discuss far more intelligently the job possibilities concerning a career in commercial fishing of this type.

Activities and teaching units were planned to accomplish one or more of the three main goals of the Program which were listed above but are repeated here for emphasis.

1. Creating awareness and information - Elementary level K-5.
2. Information, self-evaluation, and exploration - Middle school level 6-8.
3. Exploration and preparation - Senior high school level 9-12.

The quarterly report of September 30, 1972 presents a full summary of the type of objectives and the activities involved in fulfilling them. This section of the quarterly report is presented below:

Career Education Within Your Classroom

The following suggestions are presented with the hope that you, as a teacher, will possibly put some of them into use in your classrooms. We feel that there is a great need for more stress on career awareness among our students. We strongly urge that you use every means and opportunity available to you to broaden the scope of your students' vocational and occupational information.

The suggestions which follow will be divided into general and specific areas so that they may be more directly related to the curriculum and hopefully more readily applied.

General Information:

I. Relate all subject matter with the world of work and self-development.

  A. Help students to begin to think about what they may become and how the immediate subject matter will help them.

  B. Help students to think about possible careers related to the subject. Let them do research and otherwise become involved before giving them the answer.

  C. Arrange field trips to industries, etc., so that students can see and identify with real, live role models of their group.

    1. Trips should be pre-planned with students as to objectives, etc.
    2. Students should be prepared to ask good, revelant questions.
    3. Interview techniques and note taking should be rehearsed.
    4. Parents should be encouraged to participate with students.

D. Arrange for resource people to visit the classroom as role models.

E. Make bulletin boards relating subject matter to careers. (i.e.) "Arithmetic will help you get these jobs".

F. Collect occupational materials related to subjects taught. Keep a scrapbook on jobs related to subject areas.

G. Help students to study and learn about themselves in relation to subjects and careers studied. Center discussions around the following:

1. What sort of person do I think I am?
2. How do I feel about myself as I think I am?
3. What sort of person would I like to be?
4. What are my values and needs?
5. What are my aptitudes and interests?
6. What can I do to reconcile my self-ideal with real self?
7. What outlets are there for me with my needs, values, interests, and aptitudes?
8. How can I make use of these outlets?

II. Allot time for group and individual guidance with students.

A. Help them understand and develop proper attitudes toward work.

B. Help students develop and understand the importance of good personal and social habits.

1. Grooming
2. Punctuality
3. Talk
4. Courtesy
5. Responsibility
6. Originality, etc.

C. Help students to know themselves better and build a positive self-image.

1. Identify talents.
2. Understand aptitudes, interests, and abilities.
3. Explore attitudes

    4. What sort of person am I?
    5. What sort of person can I become?

III. Teach the importance and interdependence of all kinds of work.

  A. Develop appreciation and dignity for all kinds of work.

  B. Develop proper attitudes concerning sex and work.

  C. Help students understand the effects of work:

    1. Determines way of life.
    2. Determines values.
    3. Influences manner of speech, dress and leisure time activities.
    4. Determines where family lives, whom they meet, and what schools are attended.
    5. Determines whole social and economic status.

  D. Work satisfies the following needs:

    1. Physiological (food, shelter, etc.)
    2. Safety
    3. Belonging
    4. Feelings of importance, respect, self-esteem, independence
    5. Information
    6. Understanding
    7. Beauty
    8. Self-actualization

IV. Set standards equal to those of best schools.

  A. Help students to develop realistic pictures of themselves and their competencies as compared to other children with whom they will have to compete on a realistic basis in the world of work.

  B. Help students build skills, knowledge, and competencies desired by employers (pleasant personality, good grooming, potential for advancement to more responsible position within the industry).

V. Help students anticipate changes in the world of work.

   A. New Inventions.

   B. Automation.

   C. War, etc.

VI. Minority youth lack confidence, self-motivation, and self esteem. Teachers could help by:

   A. Showing greater awareness and concern for student's problems-- show that you care.

   B. Building on the student's strengths in the classroom while helping to overcome weaknesses --- emphasize success.

   C. Allowing students to become involved in planning so that they may establish their own goals and see personal meaning in working toward attaining these goals.

VII. More visible cooperation between teachers of diverse racial groups should be shown --- sets examples for children.

Specific Activities
Related to Career Education

English

1. Have students present oral reports using a job as the subject. Give physical and educational requirements--discuss tasks involved.
2. Write reports of the same nature.
3. Have students write letters of application.
4. Have students answer classified ads by letter.
5. Make alphabetical lists of various jobs.
6. Have students conduct mock interviews to check oral communication.
7. Write newspaper ads for the "Help Wanted" column.

Specific Activities Related to Career Education

Social Studies

1. Discuss the effect of climate and topography on occupations.
2. Define terms as union, civil service, social security, withholding, fringe benefits, labor, management, etc.
3. Discuss reasons for unemployment.
4. Develop a lesson showing the chain effect a person's income initiates. Show how money changes hands.
5. Have students write a job description including as many specifications as possible.
6. Discuss and simulate job finding techniques.
7. Study agencies which aid in job hunting.

Specific Activities
Related to Career Education

Mathematics

1. Figure wages for day, week, month and year based on hourly pay.
2. Math based jobs may be discussed: These include Accountant, Bookkeeper, Auditor, Payroll Clerk, Timekeeper.
3. Compute take-home pay (net) from gross pay by substracting deductions as insurance, withholding tax, union dues, etc.
4. Prepare budgets based upon average weekly pay for various jobs.
5. Have exercises involving various banking procedures.
6. In-depth study of interest rates, installment buying, and comparative shopping.

Specific Activities
Related to Career Education

Sciences

1. Identify the various jobs requiring scientific background. Include the petroleum industry, textiles, engineering, industrial chemicals, etc.

2. Conduct research to determine the extent to which such jobs exist in the Lake Charles area.

Item #14

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GRADE __________ SUBJECT AREA Math

CONCEPT Career

SUBCONCEPT There is a specific knowledge essential for each career area.

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	EVALUATION
The students will list several occupational areas and describe the basic skills needed in the performance of jobs.	The students will arrange to have several guest speakers to visit the classroom. Each speaker will describe his occupation and math related skills needed in this occupation (a variety of occupations should be stressed). A guidline will be sent to each of the guest speakers before they come into the classroom.	Guest Speakers Guideline for Guest Speaker.	The occupations discussed will be listed on a memeographed sheet and they will determine the importance of each of the jobs in terms of the amount of math involved.

GRADE ________ SUBJECT AREA Social Studies

CONCEPT Society

SUBCONCEPT Society is dependant upon the work of many people.

BEHAVICRAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	EVALUATION
The student will demonstrate a knowledge of the industries and occupations prevalent in Louisiana today.	Reference books on "Economic Development in Louisiana".	Louisiana: The Pelican State Third Edition Louisiana State Unv. Press, 1969, pp. 292-305. World Book Encyclopedia. "Louisiana Economy"	The student will identify the major occupational fields in Louisiana, and construct an outline of the various fields and the divisions within these fields.

GRADE ______ SUBJECT AREA Civics

CONCEPT Career

SUBCONCEPT There is a specific knowledge for each career area

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	EVALUATION
The student will analyse the career which reflects his vocational choice.	Let each student make a "career book" in which he will undertake a very thorough study of at least one occupation in which he is interested. Let this study include some history of the occupation, prominent persons, local, national, or international, who have been connected with it, qualities needed for success in it, facts about methods of work in the occupations, opportunities for income and achievement, and any other information that will make the study complete. Encourage the people to put his career book in as attractive a form as possible and put the best books on exhibition before the class, in the principal's office, in the school library, or in some other prominent place.	Encyclopedias Resources in Career Guidance office. Library Resources	The student will give an oral report about his career choice.

Item #16

GRADE ____________ SUBJECT AREA English

CONCEPT Career

SUBCONCEPT A person may have many careers.

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	EVALUATION
The student will select five careers and develop a record established on 5 x 8 index cards.	To keep a record of the research done in five careers chosen, the student will take notes on 5x8 index cards on the different medial available and place these notes in his "Occupational Career Folder". Bibliography information will also be placed on the index cards for future reference. Attached are the following items: 1. Information in what is to be placed in the folder. 2. Instructions on how to make note cards.	1. Films, Filmstrip 2. Cassette tapes 3. Resource people 4. Library reference—books, encyclopedias and booklets. 5. Counselor's services 6. Field trips 7. Other sources	Periodically the teacher will check the folder to make sure the student is keeping the required information in a neat and orderly manner.

Instructional Equipment and Materials.

The instructional equipment and materials for the Research and Development Project in Career Education were obtained by both purchase from commercial outlets and by production and construction by teachers, pupils, and community interprise. At the beginning of the program the following teaching materials were purchased:

Elementary Materials:

Job Puzzles - 1 set
Come To Work With Us Books - 1 set
About and True Books - 1 set
Cassette tapes for large group and individual instruction were ordered. Examples of the tapes are as follows:
Building A House, and Mr. Storekeeper.

Middle School Materials:*

Personal Typewriting for Junior High School - Books
Personal Typewriting for Junior High School - Supplementary Books
Occupational Exploration Kit
You Learn To Type - Books
Typing Drills for Speed and Accuracy
Keys - Career Exploration Program
Widening Occupational Role Kit

*These materials were ordered with emphasis on their application in the discovery and exploration method of instruction.

Secondary School Materials:

Job Experience Kit with Answer Pads & Specimen Set
People, Places and Products
Occupational Exploration Kit
Career Information Kit

A variety of supplementary materials for individual student use were ordered. Examples of these are as follows:

College, Careers, and You; Baby-Sitters' Handbook; Finding Part-Time Jobs; and How To Get The Job.

Parent-Community Involvement.

Parent-community involvement is a must in the program of Career Education as developed in Calcasieu Parish. Parents served as career education discussion leaders, as resource persons on their own job speciality, as assistants on field trips and in many other capacities during the year. The community was involved in many ways. The mayor was the narrator of several information tapes.

The Placement Officer, Aubrey L. DeRouen, made appointments with and called on the following firms in the Calcasieu Parish School Board Service area in order to promote placement of exiting students. The firms called on during the months of July and August, 1972, were as follows:

Good Year Tire and Rubber
Sears Auto Center
Wards Auto Center
Aday's Tire Center
Dimmick's Supply
Gulf National Bank
AGCO Inc.
McKenzie Pest Control
Lake Charles Auto Salvage
Faulk Duck Call Mfg.
La. State Employment Service
The Tire Mart
Penney's Auto Center
Uni-Royal Tire Center
Lake Auto Parts
Coleman Real Estate
Pamco Manufacturing
Pak-A-Sak, Inc.
Social Security Office

BUDGET

The total cost of the project for the period March 1, 1972 - August 31, 1973, was $141,146. The costs of the project components are itemized in the budget summary which follows:

Period Covered: March 1, 1972 to August 31, 1973
Revised Budget 8/21/72

Project Components	Supplemental Allocation for Vocation R and D Federal	Local
A. Guidance and Counseling Component		
1. Personnel Costs and Employee Benefits	$ 24,975	$ 29,075
2. Supplies and Materials	42,297	
B. Placement Component		
1. Personnel Costs and Employee Benefits	30,349	
2. Travel	2,400	
3. Supplies and Materials	1,000	
C Project Administration		
1. Personnel Costs and Employee Benefits		6,350
2. Travel		200
3. Supplies and Materials		1,000
4. Communications		500
5. Services		
Contracts for Third-Party Evaluation	3,000	
Totals	$104,021	$ 37,125
Grand Total $141,146		

EVALUATION REPORT

Objectives:

As stated previously Calcasieu Parish School officials clearly stated the goals of the Research and Development Project in Career Education as three fold:

1. Create awareness and information Grades K-5
2. Information, self-evaluation and exploration - Grades 6-8
3. Exploration and preparation - Grades 9-12.

For the purposes of evaluation, these goals were translated into eighteen (18) program objectives as follows:

Eight (8) General Objectives

Four (4) Elementary School objectives

Three (3) Middle School objectives

Four (4) Secondary School objectives.

These objectives were as follows:

1. The graduate fellows will conduct forty independent research sessions four hours each, to obtain a repertory of career education information during the course of the Summer Semester 1972.

2. Each graduate counseling fellow will establish a counseling office and career education resource room at the project site school wherein he is assigned prior to the opening of the 1972-73 school session.

3. The graduate fellows will conduct eight (encompassing one hour) inservice meetings at each of the project site schools in the course of the first semester of the 1972-73 academic year.

4. The graduate counseling fellows will conduct individual meetings with each teacher once per six-weeks' reporting period for the purpose of career education resource and implementation.

5. Each graduate fellow will serve as a consultant to the teaching staff in terms of implementing career education concepts into the existing curriculum.

6. Each graduate counseling fellow will structure a schedule wherein he will be available one (1) hour per day each week for the purpose of individual counseling.

7. A Vocational Guidance Workshop will be scheduled over fifteen months, six hours per month, for the purpose of inservice training related to familiarization with career development theory and an exploration of the world of work.

8. Design a model in the academic year 1972-73 to predict what percentage of the middle school population would select a technical and industrial training program upon reaching the secondary level of education.

Elementary:

9. The elementary graduate counseling fellow will conduct twenty career guidance group sessions (two (2) per class for grades 1-5) in the first semester of the 1972-73 school year for the purpose of information dissemination to students about the role of the career education guidance counselor.

10. The elementary graduate fellow will act as a consultant as each elementary teacher teaches five lessons in each of the following areas. The areas will be:

A. Lessons focusing on the interest and abilities of the children as an element of the importance of each individual.

B. Lessons with a theme concerning the relationship of the child to his family group.

C. Lessons with emphases on the relationship of a child to his neighbors and neighborhood.

D. Lessons related to the dignity and value of work.

E. Lessons related to the careers of people in the local community.

F. Lessons emphasizing the world of work and occupational information.

G. Lessons which expose students to the

fifteen occupational clusters.

11. A pre and post questionnaire survey related to the world of work will be administered by the graduate counseling and research fellows and marked by the students in the first and second semesters of the 1972-73 academic year.

Middle School:

12. The middle school counseling fellows will serve each class of students as they visit the career education resource room twice each six-weeks' period for a sixty minute period for the purpose of information dissemination about occupations in the fifteen clusters and the world of work.

13. The middle graduate counseling and research fellows will collect data on the students enrolled in the project site middle schools pertaining to achievement, intelligence, and interest area.

14. The middle school graduate counseling fellows will develop a model for guidance and counseling at the middle school level.

High School:

15. The secondary graduate counseling fellow will schedule each class of students into the testing room for at least one sixty minute visit to disseminate information

about the world of work.

16. The secondary graduate counseling fellow will schedule visits to classes in each department area for the purpose of disseminating information about the relationship of 'said' department to the world of work.

17. The secondary graduate counseling fellow will conduct five group meetings with each subject area faculty team for the purpose of establishing a career education curriculum design.

18. The secondary graduate counseling and research fellows will collect data on the students enrolled in the project site school pertaining to: (1) achievement levels; (2) intelligence; (3) interest areas; and, (4) first, second, and third career choices.

Choosing Participants.

Five schools representing grades K-12 were selected to participate in the study. The schools selected represented all geographic and socic-economic sectors of the city of Lake Charles. The combined enrollment of these five schools was approximately 3600 students. All students enrolled participated in the project. There were about the same number of boys and girls involved in the project.

Measuring Changes.

The activities designed to meet the objectives of the

Research and Development Project in Career Education for Calcasieu Parish were grouped under three headings.

1. General overall objectives - K-12
2. Elementary Grades K-5
3. Middle School Grades 6-8
4. Secondary School Grades 9-12

The measures used to determine whether the objectives of the program had been achieved were primarily the reports of the graduate fellows and a pre and post questionnaire. An examination of the objectives listed previously under the objective section of this report reveals the following information:

General Objectives - Overall program - eight process objectives measured by reports of activities of the graduate fellows.

Elementary grades K-5 - three process objectives involving action by graduate fellows. Measured by activity reports prepared and published in the Quarterly Reports of the project.

One performance objective - measured by a pre and post questionnaire administered during the fall and spring semesters of 1972-1973 academic year. Chi square was used to denote significant change.

Middle School grades 6-8 - three objectives involving action by graduate fellows - measured by activity reports prepared and published in the Quarterly Reports of the Project. In order for the graduate fellows to achieve one objective in this area they administered the following instruments: The Iowa Tests of Basic Skills; SRA Primary Mental Abilities Tests for Grades 6-9; Kuder General Interest Survey, Form E; and California Test of Personality, Elementary Form AA.

Secondary School grades 9-12 - four objectives involving action by graduate fellows. Measured by activity reports prepared and published in the Quarterly Reports of the project. In order for the graduate fellow to achieve one objective the following standardized tests were administered: The Iowa Tests of Educational Development; SRA Primary Mental Abilities Test for Grades 9-12; Kuder General Interest Survey, Form E; and California Test of Personality, Secondary Form AA.

Presentation and Analysis of Data.

The data may be obtained in detail from the six (6) Quarterly Reports submitted concurrently with this evaluation. For the purpose of this evaluation the composite of activities of the graduate fellows for the period of time January 1, 1973 to March 31, 1973 as recorded in the Quarterly Report is presented to indicate the measures of change involved in determining the effectiveness of objectives.

A. In-Service - Seven group meetings were utilized as in-service sessions. These seven sessions encompassed eleven hours and twenty-five minutes. Topics for these sessions and the time allotted to each are presented below.

GROUP MEETINGS

No. of Faculty	Grade Level	Time	Topic
16	1-5	120 minutes	Developing career concepts to implement at scheduled P.E. period during inclement weather.
10	1-5	20 minutes	Discussion of the contributions poster displays can make to career development.
16	1-5	30 minutes	Discussion of the teacher's role in developing career education by the research fellow.
16	1-5	35 minutes	Implementation of career education concepts into existing curriculum.
10	1-5	180 minutes	Self development through inter-personal development -- presented by Dr. Harrison of McNeese State University.
5	1-5	180 minutes	Evaluation of the teaching process with a view toward increasing career awareness.
16	1-5	180 minutes	Career education in the elementary grades as a component of the guidance program.

Meetings with individual teachers, one grade level, or a block assignment consumed six and one-half hours of the elementary counseling fellow's time. This time block does not include preparation of background or resource materials necessary in each meeting. An outline of these meetings are presented below.

INDIVIDUAL MEETINGS

No. of Faculty	Grade Level	Time	Topic
3	6	30 minutes	An evaluation of career education materials being used at Barbe Elementary by Mrs. P. M. Washington, Principal of Carver Elem.
3	5	30 minutes	Electrical equipment repair skill development in the elementary school.
2	4	30 minutes	Bulletin board displays and careers in the building trades.
2	4	30 minutes	Occupations in house construction -- correlated through art production.
3	5	45 minutes	Careers in the operation of a municipality.
3	3	30 minutes	Development of a farm unit stressing occupations and skills required.
2	1	20 minutes	Planned for visit by local postman and postal supervisors wherein occupations were the focal point.

B. Report of Testing - The counseling fellow at the elementary level held a conference with Mrs. Lorraine Shaw of the Calcasieu Parish Testing Team on the test administered in preceding quarter. A study was made of the Primary

Mental Ability Scores at grades three and five in a conference with Principal Billy Greeson to gain insight into developmental needs of the students enrolled in these grades. Tests were administered at LaGrange Middle School to ninety-two students by the elementary fellow in cooperation with the research fellow.

C. Observation Report - Career concept development in the existing curriculum was evident as observed in the instructional program at Barbe Elementary by the counseling fellow. Presented in tabular form the observations were:

CLASSROOM OBSERVATION

Grade Level	No. of Students	Subject Area	Time	Career Topic
2	22	Social Studies	2½ hrs.	Jobs in law enforcement
2	22	Language Arts	2½ hrs.	Careers for girls
1	27	Social Studies	1½ hrs.	Jobs in City Fire Department
1	33	Social Studies	1½ hrs.	Careers in City Fire Department
4	26	Social Studies	3 hrs.	Occupations with Hercules, Inc.
5	30	Language Arts	4 hrs.	Introduction of 15 job clusters
5	25	Language Arts	4 hrs.	Introduction of 15 job clusters
4	22	Language Arts-Fine Arts		Occupations in construction

Grade Level	No. of Students	Subject Area	Time	Career Topic
5	2	Reading	2 hrs.	Careers in the electrical field.
4	28	Social Studies	2 hrs.	Jobs of the future
1-5	127	Cross sectional	20 hrs.	Adventures in the World of Careers
5	29	English	1 hr.	What I want to be
3	45	Art	2 hrs.	Careers in farming
1-5	118	Fine Arts	5 hrs.	Careers of cowboys
1	33	Language Arts	1 hr.	Postal Service Careers
1	31	Language Arts	1 hr.	Postal Service Careers
4	28	Social Studies	1 hr.	Four kinds of farmers
Sp. Ed.	15	Social Studies	1 hr.	Careers in local fire department
Sp. Ed.	15	Health	1 hr.	Careers in dental health
Sp. Ed.	15	Health	2 hrs.	Field trip to dentist

D. Individual Counseling - Individual counseling measured approximately thirty hours of the elementary counseling fellow's time. Twenty-eight students were served in three areas. The counseling areas were educational, personal, and occupational. Self awareness related to a career consumed the largest segment of time.

E. Group Counseling - In this activity there was a time consumption factor of 39.3 hours in this quarter. Nine hundred twenty-nine students were served by this activity in thirty-five sessions. Sessions ranged in frequency from four to seven at the various grade levels including special education.

Activities of the three middle school fellows included:

A. In-Service - Three middle school fellows expended seventy-four hours discussing implementation of career education with two hundred twenty-eight teachers. This activity was completed in ninety-eight sessions of forty-five minutes each. This is an average of eleven sessions per month at each of the three schools for this quarter.

B. Report of Testing - Three days were assigned for administering a test battery in each of the middle schools. Twenty-seven hours were expended testing two hundred thirty-four students. The counseling fellow at Reynaud expended an additional sixteen hours in make-up testing involving the regular scheduled test battery.

C. Observation Report - At Reynaud Middle School thirty-two hours were expended in the observation activity. Student participants in the activities observed numbered one thousand two hundred forty-nine. Additional connotations projected by these figures indicated that each class group was observed 2.9 times in the course of this quarter.

D. Individual Counseling - This activity encompassed a large segment of the middle school counseling fellow's time in this quarter. Divided into three areas the activities and time expended in each appears below.

INDIVIDUAL COUNSELING

	Educational	Personal	Career
Grade 6	9.0 hrs.	13.0 hrs.	61.3 hrs.
Grade 7	29.0 hrs.	26.5 hrs.	103.5 hrs.
Grade 8	42.5 hrs.	18.5 hrs.	94.2 hrs.
Totals	80.5 hrs.	58.0 hrs.	259.0 hrs.

E. Group Counseling - Time expended on this project was greatest in this activity. Conducting sessions for presentation of career information, skill development, and attitudes necessary in obtaining a successful work experience was a function of the counseling fellows. In tabular form the time expenditure is as follows.

GROUP COUNSELING

Grade Level	No. of Students	Time Expended	Subject Area	No. of Sessions
6	50	1.7 hrs.	Math	2
6	1300	15.2 hrs.	Lang.Arts-History	26
6	125	3.7	Science	5
7	75	2.5 hrs.	Math	3

Grade Level	No. of Students	Time Expended	Subject Area	No. of Sessions
7	775	19.2 hrs.	Language Arts	31
7	175	3.3 hrs.	Science	7
7	250	5.5	History	10
8	150	3.[illegible] hrs.	Math	6
8	475	14.2 hrs.	History	19
8	25	0.8 hr.	Science	1
8	25	0.3 hr.	Business	1
8	425	6.8 hrs.	Language Arts	17

Numerical values relative to the number of participants indicate the repetition of class sections in the above chart. The enrollment in the three middle schools is approximately nineteen hundred students.

Activities of the secondary graduate counseling fellow included the following functions.

A. In-Service - The counseling fellow worked with twenty-two faculty members in terms of implementing career education concepts into the existing curriculum. These sessions were informal in nature and consumed approximately eleven hours of time.

B. Report of Testing - Three tests were administered to one hundred ninety-three students in this quarter. The tests were the Iowa Test of Educational Development, Primary Mental Abilities, and Kuder Interest. Preparation and testing time consumed twenty-seven hours of the counselor's time.

C. Observation Report - This activity was responsible for only a minority portion of the fellow's time in this quarter. Six hours were expended with twelve instructors.

D. Individual Counseling - Two hundred seventeen students made appointments with the counseling fellow in this quarter. All of the students were attempting to gain knowledge relative to a specific career choice.

E. Group Counseling - The counseling fellow expended the following time in group sessions as is outlined below.

GROUP COUNSELING

Grade Level	No. of Sessions	No. of Students	Time in Hours	Subject Area	Topic
9	2	57	2	English	Careers & Curriculum
12	12	118	12	Home Ec.	Career Clusters
9	1	25	1	Math	Career Clusters
10	3	75	3	English	Obtaining Employment
11	2	51	2	English	Obtaining Employment
12	5	139	5	English	Careers & Occupations
10-12	6	213	6	P.E.	Getting a Job

Grade Level	No. of Sessions	No. of Students	Time in Hours	Subject Area	Topic
9	3	84	3	Civics	Occupation Exploration Kit
10-12	6	162	6	Home Ec.	Careers for Women
9	75	127	75	English	3 week unit Careers & English
9	15	131	15	English	1 week unit Getting a Job

A presentation of career related materials was attended by the principals, graduate fellows, and counselors of the participating schools on January 9, 1973. Mr. Kevlin Braum of Chateau Films was in charge of the presentation. Placement officer Aubrey L. DeRouen was presiding officer for the meeting. (See Appendix, item #1.)

An evening P.T.A. meeting at Barbe Elementary was the site of a presentation about the career education program in Calcasieu Parish. Speaking for the Career Education Program was the Placement Officer. This meeting was conducted on January 30, 1973 at 7 o'clock.

Mr. Kenneth Mott, a field representative for Media for Education, conducted a meeting about careers and related materials on January 31, 1973. Attending this meeting were the graduate fellows and principals from the participating schools. (See Appendix, item #2.)

Placement Officer Aubrey L. DeRouen conducted a tour of the five project schools for members of E.C.A. on February 7, 1973. Impressive functional implementation was being conducted in the schools and the tour was rated as highly informative.

Mrs. Bonnelle Hendrix of Education Resources provided consultant services for the career program on February 8, 1973. Barbe High School counseling fellow Marie Foret acted as hostess for Mrs. Hendrix as an attitudinal development program was presented.

The Superintendent of Avoyelles Parish Schools and two assistants toured the career project schools on February 28, 1973. This tour was to provide an overview of three levels of career education for later implementation in Avoyelles Parish.

A slide presentation outline, aspects of the career education program, was made by Dr. Paul J. Moses, Superintendent of Calcasieu Parish Schools, to the Louisiana District V Career Education Committee members in a meeting at the Chateau Charles on March 19, 1973. Three levels of the career program were presented at this meeting.

Placement Officer Aubrey L. DeRouen conducted a presentation on the progress of the career education program to the Calcasieu Parish School Board on March 27, 1973. Participating in the meeting with Mr. DeRouen were the five counseling fellows. (See Appendix, item #3.)

Members of the Career Education Project Staff, Project Administrator, Frank W. Jernigan, Project Director Byron Shirey, and Superintendent Paul J. Moses attended a Career Education Conference at McNeese State University on March 1, 1973. The conference was established by the Education Committee of the Louisiana Legislature. Participating in the program of this conference were: Dr. Paul J. Moses, Superintendent of Calcasieu Parish Schools; Dr. Winston Riddick, Associate Superintendent, Louisiana State Department of Education; Mr. Louis Michot, Superintendent, Louisiana State Department of Education; and, others.

A Regional V Career Education meeting was attended by Placement Officer Aubrey L. DeRouen and Project Director Byron Shirey on March 30, 1973. This meeting was held at Charity Hospital in Lake Charles, Louisiana. Career education from the state level was viewed and discussed by attending individuals.

Detailed reports of activities for all six quarters of the project may be found in the Quarterly Reports submitted concurrently with this evaluation.

A twenty item pre and post questionnaire was administered to the total elementary school enrollment. Chi square was run on each question of the questionnaire in two ways. First, one of the Chi square values was obtained by using the Pre questionnaire scores as the expected frequencies. Secondly, Chi square was obtained by using a Chi square normalized distribution for the expected frequency value. The questionnaire and the results of the Chi square statistical treatment were as follows:

THIS IS A QUESTIONNAIRE ABOUT THE WORLD OF WORK. THERE ARE NO RIGHT OR WRONG ANSWERS. CIRCLE EITHER THE YES OR NO ACCORDING TO HOW YOU FEEL.

st					Normalized
**	1.	When you finish school do you want to work?	YES	NO	39.76**
**	2.	Do you think all jobs are important?	YES	NO	12.10
**	3.	Do you think people who work are happy?	YES	NO	6.29
*	4.	When you get a job do you think you will be a good worker?	YES	NO	6.10
*	5.	Do you think people should work hard?	YES	NO	19.13*
**	6.	Should all grown-ups work?	YES	NO	14.60
	7.	Would you like to have a summer job when you are old enough?	YES	NO	13.56

est					Normalized
.19	8.	Would you like to do an important job?	YES	NO	5.20
.77	9.	Should people who have families have to work?	YES	NO	9.60
.28**	10.	Should people get money who don't work?	YES	NO	22.80**
.09	11.	Do you think anybody really wants to work?	YES	NO	16.21*
.89	12.	Will you just work hard enough to get by?	YES	NO	32.15**
.48	13.	Do you think you should work to get money?	YES	NO	5.57
.22*	14.	Do you think people who work help other people?	YES	NO	16.05*
.49*	15.	Do you like adults who don't work?	YES	NO	11.55
.28**	16.	Do you like adults who work?	YES	NO	8.87
.95**	17.	Do you think people work just for money?	YES	NO	55.19**
.00**	18.	Should people ever do a job they don't enjoy?	YES	NO	112.07**
.64**	19.	Do you think people who work are unhappy?	YES	NO	82.23**
.42**	20.	Do you think people who work make lots of friends?	YES	NO	12.27

* 15.51 required for significance at the 0.05 level of confidence.

** 20.09 required for significance at the 0.01 level of confidence.

As noted above the results of the Chi square statistical treatment based upon expected frequencies from the pre questionnaire indicated a significant change in answers from pre and post in sixteen (16) of the twenty (20) questions. Significant change was noted in nine (9) of the twenty (20) questions based upon normalized expected frequencies.

Summary charts for Evaluation Design and Results are presented on the following pages for the eighteen stated objectives of the program. The data presented indicates that all objectives listed were met with the exception of objective number 8.

SUMMARY CHARTS FOR EVALUATION DESIGN AND RESULTS

PROCESS OBJECTIVE	MEASUREMENT INSTRUMENTS			DATA COLLECTION PROCEDURES			
	Name/Type of Instrument	Date Instrument to be Completed	Baseline Data	Target Group	Scheduled Date(s)	Person Responsible	Composite Results
1. The graduate fellows will conduct forty independent research sessions four hours each, to obtain a repertory of career education of information during the course of the Summer Semester 1972.	Activity Reports of graduate fellows	Completed prior to June 1, 1972	Does not apply	Graduate fellows	Monthly for June and July, 1972	Research fellow	Summer 1972 42 Sessions 4 hrs. each.
2. Each graduate counseling fellow will establish a counseling office and career education resource room at the project site school wherein he is assigned prior to the opening of the 1972-73 school session.	Minutes of Quarterly Reports	September 30, 1972	-	Reports of Graduate Fellows	September 1, 1972	Graduate fellows.	September 1972 5 centers in operation.

Results: Examination of data collected shows that the stated objectives Number 1 and 2 were met.

	MEASUREMENT INSTRUMENTS			DATA COLLECTION PROCEDURES			
PROCESS OBJECTIVE	Name/Type of Instrument	Date Instrument to be Completed	Baseline Data	Target Group	Scheduled Date(s)	Person Responsible	Composite Results
3. The graduate fellows will conduct eight (encompassing one hour) inservice meetings at each of the project site schools in the course of the first semester of the 1972-73 academic year.	Graduate fellow activity reports	Monthly	-	Classroom teachers, princip-als and counsel-ors	After each meeting	Project director	10 sessions were held at 3 schools 9 sessions were held at 1 school and 8 sessions were held at 1 sch-ool.

Examination of data collected shows that the stated objective number 3 was met.

PROCESS OBJECTIVE	MEASUREMENT INSTRUMENTS			DATA COLLECTION PROCEDURES			
	Name/Type of Instrument	Date Instrument to be Completed	Baseline Data	Target Group	Scheduled Date(s)	Person Responsible	Composite Results
4. The graduate counseling fellows will conduct individual meetings with each teacher once per six-weeks' reporting period for the purpose of career education resource and implementation.	Graduate fellow activity reports.	Monthly	-	Classroom teachers in participating schools	Monthly	Project director	Each counselor met a total of 7 times with each teacher.
5. Each graduate fellow will serve as a consultant to the teaching staff in terms of implementing career education concepts into the existing curriculum.	Graduate fellow activity reports.	Monthly	-	Classroom teachers in participating schools	Monthly	Project director	97 activities indicate this was done.

Examination of data collected show that objectives number

4 and 5 were met.

SUMMARY CHARTS FOR EVALUATION DESIGN AND RESULTS

PROCESS OBJECTIVE	MEASUREMENT INSTRUMENTS			DATA COLLECTION PROCEDURES			
	Name/Type of Instrument	Date Instrument to be Completed	Baseline Data	Target Group	Scheduled Date(s)	Person Responsible	Composite Results
6. Each graduate counseling fellow will structure a schedule wherein he will be available one (1) hour per day each week for the purpose of individual counseling.	Prepared schedules of graduate fellows.	September 1, 1972	-	Graduate fellows	September 1972	Project director	Copies of schedules are available.
7. A Vocational Guidance Workshop will be scheduled over fifteen months, six hours per month, for the purpose of in-service training related to familiarization with career development theory and an exploration of the world of work.	Schedule of meetings.	Monthly	-	Calcasieu Parish counselors, Project director, Project Administrator and director of Special Services	Monthly	Project director	Meetings of 2 hour duration were held each Wednesday afternoon in the Resource Center. Present at most of these meetings were, Project Administrator, Project director, Director

SUMMARY CHARTS FOR EVALUATION DESIGN AND RESULTS

PROCESS OBJECTIVE	MEASUREMENT INSTRUMENTS			DATA COLLECTION PROCEDURES			
	Name/Type of Instrument	Date Instrument to be Completed	Baseline Data	Target Group	Scheculed Date(s)	Person Responsible	Composite Results
							of Special Services, Graduate fellows, and Counselors of Calcasieu Parish Schools.

Examination of data collected indicates that the stated objectives number 6 and 7 were met.

PROCESS OBJECTIVE	MEASUREMENT INSTRUMENTS			DATA COLLECTION PROCEDURES			
	Name/Type of Instrument	Date Instrument to be Completed	Baseline Data	Target Group	Scheduled Date(s)	Person Responsible	Composite Results
8. Design a model in the academic year 1972-73 to predict what percentage of the middle school population would select a technical and industrial training program upon reaching the secondary level of education.	Kuder General Interest Survey Form E. Iowa Tests of Basic Skills; SRA Primary Mental Abilities Tests for Grades 6-9; and California Test of Personality, Elementary Form AA.	Already in use.	Not applicable.	1850 Middle school students and 250 Secondary school students a total of approximately 2100 students	Test data-Fall 1972.	Research graduate fellow.	Research on file in School Board office. Model not established due to communalities that existed between academic groups and T and I groups.
Elementary 9. The elementary graduate counseling fellow will conduct twenty career guidance sessions (two (2) per class for grades 1-5) in the first semester of the 1972-73 school year for the purpose of information dissemination to students about the role of the career education guidance counselor.	Graduate fellow activity reports.	Monthly	-	500 elementary school students	Monthly for Fall semester 1972	Elementary school graduate fellow	

Examination of data presented shows that objective number 8 was not met. The model was not constructed due to communalities that existed among students. See following pages.

Stated objective number 9 was met.

Stated objective number 8 which required the development of a model to predict what percentage of middle school population would select a technical and industrial training program upon reaching the secondary level of education was not met.

The research for this objective was incorporated into a dissertation study by the Research fellow and is on file in the Calcasieu Parish School Board Office.

Part of the basis for study was the fact that when t-tests were run on variables at the Secondary level between academic and T and I areas significant differences were found to exist. The results obtained for ten (10) variables as presented below indicated that seven (7) of the ten (10) factors tested were significant at the 0.05 level of confidence or beyond.

When, however, the sixth (6) grade students were compared with those on the Secondary level no significant differences were found. Results of the t-test at all levels indicated some significant differences but not enough to establish a pattern upon which a design model could be developed.

TABLE I

STUDENT TYPE, Clerical KUDER INTEREST AREA, NUMBER OF STUDENTS, MEAN, STANDARD DEVIATION, MEAN DIFFERENCE, STANDARD ERROR OF THE DIFFERENCE IN MEANS AND t-ratio FOR STUDENTS ENROLLED IN Secondary T & I AND STUDENTS ENROLLED IN Secondary Academic

Student Type	Kuder Interest Area	N	df	Mean	Variance	SD	M_1-M_2	σ_D	t-ratio
Secondary T & I		178	177	62.33	153.88	12.40			
	Clerical						4.00	1.79	2.23*
Secondary Academic		100	99	58.33	232.63	15.25			

* 1.97 Significant at or beyond the .05 level of confidence

** 2.59 Significant at or beyond the .01 level of confidence

TABLE 2

STUDENT TYPE, Musical KUDER INTEREST AREA, NUMBER OF STUDENTS, MEAN, STANDARD DEVIATION, MEAN DIFFERENCE, STANDARD ERROR OF THE DIFFERENCE IN MEANS AND t-ratio FOR STUDENTS ENROLLED IN Secondary T & I AND STUDENTS ENROLLED IN Secondary Academic

Student Type	Kuder Interest Area	N	df	Mean	Variance	SD	$M_1 - M_2$	σ_D	t-ratio
Secondary T & I		178	177	15.11	67.88	8.24			
	Musical						6.55	0.86	7.62**
Secondary Academic		100	99	8.56	35.50	5.96			

* 1.97 Significant at or beyond the .05 level of confidence

** 2.59 Significant at or beyond the .01 level of confidence

TABLE 3

STUDENT TYPE, Literary KUDER INTEREST AREA, NUMBER OF STUDENTS, MEAN, STANDARD DEVIATION, MEAN DIFFERENCE, STANDARD ERROR OF THE DIFFERENCE IN MEANS AND t-ratio FOR STUDENTS ENROLLED IN Secondary T & I AND STUDENTS ENROLLED IN Secondary Academic

Student Type	Kuder Interest Area	N	df	Mean	Variance	SD	$M_1 - M_2$	σ_D	t-ratio
Secondary T & I		178	177	31.89	111.75	10.57			
	Literary						5.78	1.29	4.48**
Secondary Academic		100	99	37.67	103.38	10.17			

* 1.97 Significant at or beyond the .05 level of confidence

** 2.59 Significant at or beyond the .01 level of confidence

TABLE 4

STUDENT TYPE, Artistic KUDER INTEREST AREA, NUMBER OF STUDENTS, MEAN, STANDARD DEVIATION, MEAN DIFFERENCE, STANDARD ERROR OF THE DIFFERENCE IN MEANS AND t-ratio FOR STUDENTS ENROLLED IN Secondary T & I AND STUDENTS ENROLLED IN Secondary Academic

Student Type	Kuder Interest Area	N	df	Mean	Variance	SD	$M_1 - M_2$	σ_D	t-ratio
Secondary T & I		178	177	29.78	84.00	9.17			
	Artistic						3.89	1.32	2.95**
Secondary Academic		100	99	33.67	126.13	11.23			

* 1.97 Significant at or beyond the .05 level of confidence

** 2.59 Significant at or beyond the .01 level of confidence

TABLE 5

STUDENT TYPE, Outdoor KUDER INTEREST AREA, NUMBER OF STUDENTS, MEAN, STANDARD DEVIATION, MEAN DIFFERENCE, STANDARD ERROR OF THE DIFFERENCE IN MEANS AND t-ratio FOR STUDENTS ENROLLED IN Secondary T & I AND STUDENTS ENROLLED IN Secondary Academic

Student Type	Kuder Interest Area	N	df	Mean	Variance	SD	M_1-M_2	σ_D	t-ratio
Secondary T & I		178	177	25.67	105.63	10.28			
	Outdoor						2.23	0.98	2.28*
Secondary Academic		100	99	23.44	40.00	6.33			

* 1.97 Significant at or beyond the .05 level of confidence

** 2.59 Significant at or beyond the .01 level of confidence

TABLE 6

STUDENT TYPE, Mechanical KUDER INTEREST AREA, NUMBER OF STUDENTS, MEAN, STANDARD DEVIATION, ~~MEAN DIFFERENCE~~, STANDARD ERROR OF THE DIFFERENCE IN MEANS AND t-ratio FOR STUDENTS ENROLLED IN Secondary T & I AND STUDENTS ENROLLED IN Secondary Academic

Student Type	Kuder Interest Area	N	df	Mean	Variance	SD	$M_1 - M_2$	σ_D	t-ratio
Secondary T & I		178	177	46.44	170.75	13.07			
	Mechanical						12.11	1.90	6.37**
Secondary Academic		100	99	34.33	264.37	16.26			

* 1.97 Significant at or beyond the .05 level of confidence

** 2.59 Significant at or beyond the .01 level of confidence

TABLE 7

STUDENT TYPE, Computational KUDER INTEREST AREA, NUMBER OF STUDENTS, MEAN, STANDARD DEVIATION, MEAN DIFFERENCE, STANDARD ERROR OF THE DIFFERENCE IN MEANS AND t-ratio FOR STUDENTS ENROLLED IN Secondary T & I AND STUDENTS ENROLLED IN Secondary Academic

Student Type	Kuder Interest Area	N	df	Mean	Variance	SD	M_1-M_2	σ_D	t-ratio
Secondary T & I		178	177	35.33	89.63	9.47			
	Computational						9.44	1.25	7.55**
Secondary Academic		100	99	25.89	107.13	10.35			

* 1.97 Significant at or beyond the .05 level of confidence

** 2.59 Significant at or beyond the .01 level of confidence

TABLE 8

STUDENT TYPE, Scientific KUDER INTEREST AREA, NUMBER OF STUDENTS, MEAN, STANDARD DEVIATION, MEAN DIFFERENCE, STANDARD ERROR OF THE DIFFERENCE IN MEANS AND t-ratio FOR STUDENTS ENROLLED IN Secondary T & I AND STUDENTS ENROLLED IN Secondary Academic

Student Type	Kuder Interest Area	N	df	Mean	Variance	SD	M_1-M_2	σ_D	t-ratio
Secondary T & I		178	177	28.78	67.75	8.23			
	Scientific						3.00	1.59	1.89
Secondary Academic		100	99	31.78	215.00	14.67			

* 1.97 Significant at or beyond the .05 level of confidence

** 2.59 Significant at or beyond the .01 level of confidence

TABLE 9

STUDENT TYPE, Persuasive KUDER INTEREST AREA, NUMBER OF STUDENTS, MEAN, STANDARD DEVIATION, MEAN DIFFERENCE, STANDARD ERROR OF THE DIFFERENCE IN MEANS AND t-ratio FOR STUDENTS ENROLLED IN Secondary T & I AND STUDENTS ENROLLED IN Secondary Academic

Student Type	Kuder Interest Area	N	df	Mean	Variance	SD	M_1-M_2	σ_D	t-ratio
Secondary T & I		178	177	54.67	403.38	20.08			
	Persuasive						0.45	1.76	0.26
Secondary Academic		100	99	54.22	81.50	9.03			

* 1.97 Significant at or beyond the .05 level of confidence

** 2.59 Significant at or beyond the .01 level of confidence

TABLE 10

STUDENT TYPE, Social Service KUDER INTEREST AREA, NUMBER OF STUDENTS, MEAN, STANDARD DEVIATION, MEAN DIFFERENCE, STANDARD ERROR OF THE DIFFERENCE IN MEANS AND t-ratio FOR STUDENTS ENROLLED IN Secondary T & I AND STUDENTS ENROLLED IN Secondary Academic

Student Type	Kuder Interest Area	N	df	Mean	Variance	SD	$M_1 - M_2$	σ_D	t-ratio
Secondary T & I		178	177	47.22	193.75	13.92			
	Social Service						1.11	1.93	0.58
Secondary Academic		100	99	48.33	264.88	16.27			

* 1.97 Significant at or beyond the .05 level of confidence

** 2.59 Significant at or beyond the .01 level of confidence

	MEASUREMENT INSTRUMENTS			DATA COLLECTION PROCEDURES			
PROCESS OBJECTIVE	Name/Type of Instrument	Date Instrument to be Completed	Baseline Data	Target Group	Scheduled Date(s)	Person Responsible	Composit Results
10. The elementary graduate fellow will act as a consultant as each elementary teacher teaches five lessons in each of the following areas. The areas will be: A. Lessons focusing on the interest and abilities of the children as an element of the importance of each individual. B. Lessons with a theme concerning the relationship of the child to his family group. C. Lessons with emphases on the relationship of a child to his neighbors and neighborhood.	Graduate fellow activity reports for the Elementary Grades K-5.	Monthly	-	Teachers and students in Elementary school	Monthly	Project director	Reports show that in all schools graduate fellow di act as consultant

Objective 10 was met.

SUMMARY CHARTS FOR EVALUATION DESIGN AND RESULTS

PROCESS OBJECTIVE	MEASUREMENT INSTRUMENTS			DATA COLLECTION PROCEDURES			
	Name/Type of Instrument	Date Instrument to be Completed	Baseline Data	Target Group	Scheduled Date(s)	Person Responsible	Composite Results
10 cont'd. D. Lessons related to the dignity and value of work. E. Lessons related to the careers of prople in the local community. F. Lessons emphasizing the world of work and occupational information. G. Lessons which expose students to the fifteen occupational clusters.							

PROCESS OBJECTIVE	MEASUREMENT INSTRUMENTS			DATA COLLECTION PROCEDURES			
	Name/Type of Instrument	Date Instrument to be Completed	Baseline Data	Target Group	Scheduled Date(s)	Person Responsible	Composite Results
11. A pre and post questionnaire survey related to the world of work will be administered by the graduate counseling and research fellows and marked by the students in the first and second semesters of the 1972-73 academic year.	Pre and Post questionnaire with changes measured by application of Chi Square	In use	Pre questionnaire data	1850 middle school students and 250 secondary students	Pre data Fall 1972 Post data Spring 1973	Research graduate fellow	Questionnaire results were presented.

Objective number 11 was met.

	MEASUREMENT INSTRUMENTS			DATA COLLECTION PROCEDURES			
PROCESS OBJECTIVE	Name/Type of Instrument	Date Instrument to be Completed	Baseline Data	Target Group	Scheduled Date(s)	Person Responsible	Composite Results
Middle School							
12. The middle school counseling fellows will serve each class of students as they visit the career education resource room twice each six weeks' period for a sixty minute period for the purpose of information dissemination about occupations in the fifteen clusters and the world of work.	Graduate fellow activity reports	Monthly	-	1850 middle school students	Collected daily Reported monthly	Project director	Reports and schedules indicate that this was done.
13. The middle graduate counseling and research fellows will collect data on the students enrolled in the project site middle schools pertaining to achievement, intelligence, and interest area.	Student records maintained in each Career Education Center of participating middle schools	May, 1973	-	1850 middle school students	Collected daily Reported May, 1973	Research graduate fellow	Reports and school records show this was done.

Objectives number 12 and 13 were met

PROCESS OBJECTIVE	MEASUREMENT INSTRUMENTS			DATA COLLECTION PROCEDURES			
	Name/Type of Instrument	Date Instrument to be Completed	Baseline Data	Target Group	Scheduled Date(s)	Person Responsible	Composite Results
14. The middle school graduate counseling fellows will develop a model for guidance and counseling at the middle school level.	Progress reports	Tentative model by September, 1972	-	1850 middle school students and counselors of Calcasieu Parish	Monthly final May, 1973	Project director	Activity reports show that tentative model was in operation during the 1972-73 school session.
High School 15. The secondary graduate counseling fellow will schedule each class of students into the testing room for at least one sixty minute visit to disseminate information about the world of work.	Graduate fellow activity reports	Monthly	-	250 secondary school students	After each scheduled session and reported monthly	Project director	Activity reports and school schedules indicate this was done.

Objectives 14 and 15 were met.

SUMMARY CHARTS FOR EVALUATION DESIGN AND RESULTS

PROCESS OBJECTIVE	MEASUREMENT INSTRUMENTS			DATA COLLECTION PROCEDURES			
	Name/Type of Instrument	Date Instrument to be Completed	Baseline Data	Target Group	Scheduled Date(s)	Person Responsible	Composite Results
16. The secondary graduate counseling fellow will schedule visits to classes in each department area for the purpose of disseminating information about the relationship of "said" department to the world of work.	Graduate fellow activity reports	Monthly	-	250 secondary school students in participating secondary school	Monthly	Project director	Activity reports and school schedules indicate that this was done.
17. The secondary graduate counseling fellow will conduct five group meetings with each subject area faculty team for the purpose of establishing a career education curriculum design.	Graduate fellow activity reports	Monthly	-	Secondary school faculty members approximately 80 teachers	Monthly	Project director	Activity reports show that this was done.

Objectives 16 and 17 were met.

PROCESS OBJECTIVE	MEASUREMENT INSTRUMENTS			DATA COLLECTION PROCEDURES			
	Name/Type of Instrument	Date Instrument to be Completed	Baseline Data	Target Group	Scheduled Date(s)	Person Responsible	Composite Results
18. The secondary graduate counseling and research fellows will collect data on the students enrolled in the project site schools pertaining to: (1) achievement levels; (2) intelligance; (3) interest areas; (4) first, second, and third career choices.	Student records maintained in the Career Education Center at the high school	May, 1973	-	250 secondary students	Collected daily, reported monthly	Research graduate fellow	Records indicate that data was collected on students.

Objective number 18 was met.

Report of Findings.

The analysis of data obtained from the graduate fellow reports and the analysis of the questionnaire and tests results led to the following findings:

1. Career Education can be effectively placed in the existing school curriculum grades K-12.

2. A career oriented counselor can, through inservice training, consultant activities, and as a resource person in general, provide the leadership necessary to develop an effective career education program in all grades K-12.

3. The research involved in attempting to establish a model to predict the choices of the middle school students upon entering the secondary schools, clearly indicates that career education can be effectively taught within the existing framework of our public schools without developing the so-called tract type curriculum.

The above findings were evident in a program designed and organized to:

1. Provide awareness of orientation and information about the World of Work at the elementary level, K-5;

2. Provide information, self-evaluation, and exploration at the middle school level, grades 6-8;

3. Provide exploration and preparation at the

senior high level, grades 9-12.

The findings of this evaluation, therefore,may not apply in other patterns of organization, nor with special grouping of students. The program as developed here was on the bases that all students would participate in acquiring a body of knowledge about the World of Work necessary to make intelligent choices, persue several choices with on-hand experiences, concentrate on preparation of final selections.

RECOMMENDATIONS

On the basis of the success of the Research and Development Project in Career Education for Calcasieu Parish Schools, the following recommendations are made:

1. Further intensive study should be made in the pilot schools.

2. The information obtained during the past research period should be utilized and the Career Education Program extended to other schools in Calcasieu Parish as funds permit.

3. Special effort should be exerted to maintain the homogenious qualities that now exist between the academic and trade and industry students.

BODY OF THE REPORT

RESEARCH AND DEVELOPMENT IN CAREER EDUCATION

PROJECT #V261029L

SECTION 6f

CONCLUSIONS

Conclusions, Implications, and Recommendations

Conclusions

Conclusions can be deducted from the various components of this project. However, a feasible reporting of conclusions can be made as follows: (1) successes of the project; (2) a need for in-service; (3) contributions of community resources; and, (4) extended period of a research project.

Successes of the project. One may conjecture that this project established models for career guidance and counseling services at the elementary, middle, and secondary school levels. Implementing career education concepts as a part of the existing curriculum was demonstrated as a result of this project. Aids for career education curriculum development were established as a result of the impetus from this Grant.

A need for in-service. This project created a situation wherein administrative personnel focused on the need for in-service to inform teachers about the career education concept as well as a vehicle for the development of methodology.

Contributions of community resources. This project renewed a thrust whereby educators utilized elements from the community as facilitators for learning. Resource people and on-site-visitations were used to facilitate concept building about the world of work.

Extended period of a research project. One may conjecture that a three year project would provide a situation wherein goals could be re-aligned, and thereby, the project would provide results that could be termed relatively concrete as compared to the results of a one year project.

Implications

Implications derived from this project can be isolated into four areas. The areas are as follows: (1) results extracted from statistical procedures; (2) increased self-discipline on part of the students; (3) increased self-awareness; and, (4) increased compatibility in job selection.

Results extracted from statistical procedures. The statistical results of this project implied that career education concepts infused into the existing curriculum did affect the behavior of elementary students. Middle school statistical results appeared to indicate that interest profiles of middle school students could be utilized in instructional activities to enhance career education concepts. At the project site secondary school, statistical results indicated that a model could not be established to predict what middle school students would select vocational courses at the secondary level based on achievement, intelligence, and interest measures.

Increased self-discipline on part of the students. The elementary administrator indicated that few discipline problems were experienced by his staff in the project year, and the administrator credited the reduction in discipline to an increase in self-discipline resulting from career education activities.

Increased self-awareness. Efforts were expended to enhance self-awareness in terms of the students at each level of the school system. These activities were termed successful, and the activities appeared to imply that a positive self-image was an integral part of a successful life in any career.

Increased compatibility in job selection. This project effort implies that exiting students should select jobs that are more closely aligned with their goals, interest, and ability than they would have prior to this project. One benefit of a functional career education program appears to lie herein.

Recommendations

Many recommendations could be made from this project. Two recommendations appear to emerge from the field. The recommendations are as follows: (1) a continued research effort; and, (2) an extended period of time.

A continued research effort. Career education appears to be a viable part of the total education effort. Therefore, to prevent errors that could prove costly to society, it is recommended that research projects continue wherein objectives and goals can be continually revised. These projects would serve as a source of supply for new ideas to enhance the career education concept.

An extended period of time. The one-year career education project in Calcasieu Parish has proven to be extremely benefical in many areas. However, one may conjecture that a three-year project would permit time to re-align objectives and establish results that will not be discovered in a one-year project. Therefore, a three-year project Grant is recommended.

Dr. Thomas Clausen
Assistant Superintendent
Instructional Services
State Department of Education

Date

Frank W. Jernigan, Jr.
Assistant Superintendent
Instruction & Curriculum
Calcasieu Parish Schools

August 31, 1973
Date

APPENDIX A

AIDS FOR CURRICULUM DEVELOPMENT
IN CAREER EDUCATION
GRADES K-2

GRADE K-2 SUBJECT AREA Awareness of Self

CONCEPT Environment

SUBCONCEPT Awareness of the environment through learning.

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
1. Heightening the children's awareness of the sounds in his environment. 2. Use of your senses. 3. Awareness of how other people listen.	Theme activity: Recorded Story - The Sound Machine Questions for discussion Listening activity Open end sentences Use in coordination with music.	SRA Unit E Awarness, Stage I, Unit E	The children became aware of everyday sounds. The children learned about their senses. Became aware of others.

GRADE K-2 SUBJECT AREA Health

CONCEPT Career Awareness

SUBCONCEPT Nursing

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
1. Children will be able to tell the difference between doctors and nurses. 2. The children will learn that there are "mate" nurses. 3. The children will state the different kinds of nurses and what their duties are. 4. Children will list the reasons why neatness and cleaniness are part of a nurse's job. 5. Children will state reasons a mother must know simple nursing and how training could help.	1. Dramatization - act out jobs of male and female nurses. 2. Stories: a. Nancy Plays Nurse b. About Miss Sue The Nurse 3. Nurse puzzle 4. Charts 5. Community Helper Posters - Instructor 6. Resource personnel visit the classroom a. School nurse b. Mother who is practical nurse or nurse's aide	Play Nurse Kit I Want to Be a Nurse Childrens Press	Children decide that nurses are "good" people who help others feel better. They decide that all mothers are nurses in a sense and that nurse training would benefit any mother. Discuss making money and places they work such as clinics, hospitals offices and plants.

GRADE K-2 SUBJECT AREA Language Arts

CONCEPT Self Awareness

SUBCONCEPT Child's Awareness of Unique Physical Being

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
1. The child will tell about himself. 2. The child will describe his friend. 3. The children will find out about themselves and list some things they like and some things they do not like.	1. The child will tell what Cindy did when the elf left. 2. The children will act out what happened between Cindy and the elf. Recorded story - Cindy and Elf. Children use mirror to describe himself. As a result of this unit full length mirrors should be installed where children enter most often. Words of encouragement printed above such as "We Love You."	SRA Focus Stage I Awareness Small hand mirror	

GRADE K-2 SUBJECT AREA Language Arts, Science

CONCEPT Senses - See

SUBCONCEPT Awareness of one's self as important in identifying interests, abilities and aspirations

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
1. Each child will list the things he can do because he can see. 2. Individuals will list workers who must see to do their jobs.	1. Children will use eyes to identify articles in classroom and classmates. 2. Discuss how sight helps us. 3. Children recognize their names on a picture of themselves. 4. Children identify colors and shapes - scenery (or imaginative places they can see). 5. Game - Blind Man Bluff 6. Discuss ways a person can compensate for loss of sight. 7. What have we done to help people see better? 8. May emphasize how glasses help us see better - some children have a fear of wearing glasses.	SRA Awareness Stage I, Unit F Paper dolls or pictures of themselves.	Children will identify names of their classmates and objects. Each child can name one worker who must see to do his work.

GRADE K-2 SUBJECT AREA Math

CONCEPT Awareness - Senses

SUBCONCEPT Unit F Environment through seeing

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
Student will list round objects, straight objects, distinguish between colors. Children will explore vocabulary word "environment" and list its meaning to them.	1. Filmstrip - Magic Glasses (SRA Stage I Awareness. 2. Group objects - colors together. 3. Use binoculars to understand seeing things. 4. Make a pair of magic glasses. Teach the word environment. 5. Use open ended sentences page 58 - guide book, photoboards 15, 16, 6 open end discussion. 6. Games - describing people guessing who.	Awareness SRA Unit E. Book- Who Lives in This Meadow by: Blough Really Spring Harper Row 56, Gene Zion, a pair of binoculars	

GRADE K-2 SUBJECT AREA Math

CONCEPT People work to satisfy needs and wants.

SUBCONCEPT Money is compensation in grocery stores.

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
1. Children will list the importance of the grocery store. 2. Children will classify workers and goods in the correct department of grocery store. 3. Children will identify a penny, nickel, dime, quarter, and dollar. 4. Children will read and write the prices of items.	Children will plan, organize, and operate a play store. Children will identify shapes of articles in the store. Children will visit a nearby grocery store - work with or help each department worker. They will invite parents to shop at their grocery store.	1. Book - I Want To Be A Store keeper Childrens Press 1958 Greene, Carla. 2. See unit for resource real and play cash registers, empty boxes, cartons, cans. 3. Grocery store near school. 4. Cassette song "Grocery Store".	Can children understand how a grocery store operates? Can they read a scale and work cash registers? This unit can be extended to include pricing articles, figuring profit, competitive buying for the higher grades.

GRADE K-5 SUBJECT AREA Music

CONCEPT Culmunating Activity

SUBCONCEPT Musical

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
Children will recite poetry, sing songs, play rythum bands about different areas of work.	Each grade performs for faculty, parents 1st grade - Banking, Orkin 2nd grade - 3rd grade - Plow - Hold On Poems: When I Grow Up, Much Rather, A Wish 4th grade - Sailors 5th grade - Inventors song Special Ed. (Primary) - Rythum band.	Making Music K-5 Original words to fit tunes they already know.	Children realized enjoyment in singing about different careers and performing for parents, friends, and teachers. The appreciation of work and music was apparent.

GRADE K-2 SUBJECT AREA Physical Education

CONCEPT Workers Have Many Jobs

SUBCONCEPT Pantomine (community helpers)

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
1. The student will name community helpers. 2. The students will name jobs they do. 3. The students will name tools they use.	1. Pantomine: Street-sweeper; Policeman giving ticket, directing traffic, etc.; Fireman putting out fire, saving pet; Telephone - lineman; Doctor - tending sick; Judge, Teacher, Planting flowers, Public Works, Clerk - using cash register; Nurse - filling station; Druggist; Secretary; Salesman. 2. Teacher should be creative here bringing community helpers students know.	Community Helpers - Ideal Modern Workers Series	Children realized the many jobs our helpers do to keep our community working. Jobs can be adjusted to meet needs of school community. Teachers should stress cooperation in all work and play.

GRADE K-2 SUBJECT AREA Physical Education

CONCEPT People Work Together

SUBCONCEPT Cooperation

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
1. Children will play games where cooperation is necessary. 2. Children will answer open ended sentences.	Story from SRA Awareness Kit - Children will answer-When I am with others ____________. I like to be with others because ____________. I can work with others because ____________. Partners - ballon game which two can keep their ballon up longest. Divide group into smaller groups with instructions to elect a leader and group choose one or more games to play.	SRA Awareness	

GRADE K-2 SUBJECT AREA Science and Music

CONCEPT Awareness

SUBCONCEPT Awareness of Sound in Environment Through One of the Senses.

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
1. Children will name sound machines. 2. Children will name sounds in his school,& neighborhood. 3. Children will list how he feels when he hears sounds. 4. Children will name occupations that involve sound and hearing. 5. Children will make his own sound machine to use as rythm band instruments.	1. Game: What's In the Box - sound game. Music teacher uses homemake sound instruments in class. 2. Field trip to TV or radio to understand career in sound. Science teacher demonstrates vibrations. 3. Echos, study of ear and functions - importance of hearing.	Awareness Unit E Awareness	

GRADE K-2 SUBJECT AREA Social Living, Math

CONCEPT Career

SUBCONCEPT Banking

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
1. The children will dramatize how a bank works. 2. The children will explore the different jobs in a bank. 3. The children will see how a bank operates by visiting one. 4. The children will sing an original song about a bank.	1. Book - Come to Work With Us in a Bank. 2. Make a bank out of a fiber board house. 3. Films - Economics - Money; Why We Use Money 4. Pantomine workers in a bank. 5. Trip to bank. 6. Make up an original song on banking 7. Children deposit money for community drive in cardboard bank. Children went to bank to get change and loan to buy things.	Career Education Library American Bank of Commerce McNeese Library Math Test Cassette tape of original song "Money in the Bank"	Very successful interest high and children grew in their understanding of money, it's uses and banks and the role they play.

GRADE K-2 SUBJECT AREA Social Living

CONCEPT Career Awareness

SUBCONCEPT Working Together

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
1. Children will assume responsibility for small jobs. 2. Children will tell about fun and satisfaction they got in a job done well. 3. Children will report on working harmoniously at home for better family relations. 4. Children will list three good job habits.	1. Film - Our Family Works Together 2. Dramatize a family planning a project together and everyone carrying out their job and doing their part. 3. Discuss what would happen if one person did not accept his responsibility.	McNeese Library SRA Awareness Stage I Unit H, I and J	Children showed how this could carried over to work in the cla room.

GRADE K-2 SUBJECT AREA Social Living

CONCEPT Career Awareness

SUBCONCEPT Specialization in jobs

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
1. Children will explore all people have basic needs. 2. Children will discover that people desire many things to make life pleasant. 3. Children will note that when people specialize they can pick what they like to do best. 4. Children will name some people who produce things, who perform services for us.	1. Film - Why People Have Special Jobs. (The Man Who Makes Spinning Tops) 2. Guessing game - show an object and guess who makes it, how is it used, where would we find it, etc.? 3. Who helps us when a. We are sick b. The TV is broken c. Our house is on fire d. We have a flat tire, etc.?	McNeese Library Coronet Workers Series - People Who Perform Services and People Who Make Things	Children will name jobs where people make things and perform services. The use of the "top" to show specialization had much appeal to first graders. They saw how even such a small object had many "jobs" behind it, related to it, and depending on it.

GRADE K-2 SUBJECT AREA Social Living

CONCEPT Careers

SUBCONCEPT Self Awareness and Awareness of Others

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
1. To make children aware of themselves. 2. To make children aware of others. 3. To make children aware that other people have feelings too.	1. Make "feelings" posters for children to relate to. 2. Have children act out feelings. 3. Make body outline of each child and have him color it. 4. Make bulletin board using children's photos. 5. Clip out pictures of different expressions and let children identify them. 6. Using the photos "feelings" talk about how emotions can be important in working.		Children's attitude and enthusiasm Teacher self evaluation Teacher-pupil conference Teacher observation Written or oral test Outcome of subject matter taught

GRADE K-2 SUBJECT AREA Social Living

CONCEPT Self-Awareness

SUBCONCEPT Awareness of Feelings and Self

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
1. To show in our "Me" books how "I" and my friends, family, home, etc. are unique with me. 2. To show reaction when we are happy, sad, angry, worried, etc.	1. Filmstrips - Circle of Faces 2. "Me" Books 3. Pantomines 4. Stories: Human Value Series, Teaching Pictures Lesson 9, large accompanying pictures. "Me" books - books made by children in the classroom 5. Discuss pictures drawn	SRA Awareness Stage I Bowmar Early Childhood Human Value Series Dynamo Power Ed. Media	"Me" books are very successful. Children were quite anxious each day for time to draw in them. Also their reactions to the other children's drawings were good.

GRADE K-2 SUBJECT AREA Social Living

CONCEPT Community Workers

SUBCONCEPT Firemen

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
1. Children will list the duties of firemen. 2. Children will construct experience chart of field trip. 3. Students will see firemen dress for duty and perform other necessary jobs with tools of job. 4. Children will see the fire station where the firemen live and work. 5. List jobs firemen do while at fire station. 6. List ways firemen must work together to help others.	1. Listening to stories about firemen 2. Discuss pictures of firemen work tools 3. View filmstrip - The Firemen 4. The job of fireman-draw pictures of fireman tools 5. View original slides and tape 6. Dramatize - use chairs to make a fire truck, raincoats, boots. 7. Field trip to fire station 8. Film - Firehouse Dog Filmstrip - Hook and Ladder The Fire Department Story.	Film - Firehouse Dog, Mr. Charlie The Fireman's Friend, About Firemen Community Helpers Posters Filmstrip - Hook and Ladder, the Fire Department Story Resource Person Fire Chief or student's father that is a fireman Original slides and tapes on firemen	Children gained valuable information about firemen and their work. Fact that firemen are daddies-working for a living and helping in the community was realized.

GRADE K-2 SUBJECT AREA Social Studies

CONCEPT Occupational Information About the World of Work

SUBCONCEPT Jobs in a school.

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
Children will list workers in school and their duties.	Use transparencies and pictures to introduce each worker. Visit each worker - or invite those in such as School Nurse that cannot be visited. Other stations to visit are: Principal's office, Secretary's office, Librarian, Janitor, Teachers, Cooks, Guidance office. Stories: Game Who Am I Sing song Draw and color workers.	Resource people School staff Transparencies of school workers Book: I Want to Be A Nurse, Librarian, Teacher (Childrens Press) Our School Workers McGraw Hill	

AIDS FOR CURRICULUM DEVELOPMENT
IN CAREER EDUCATION
GRADES 3-5

GRADE 3-5 SUBJECT AREA Art

CONCEPT Many people work at many different jobs.

SUBCONCEPT Comparing occupations

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
1. The student will name many jobs. 2. The students will name jobs that interest them most. 3. The student will name the job of father, mother, or a friend.	1. Each child is shown pictures of patchwork quilts. 2. Stories of quilting parties are read. 3. A design is figured out for a quilt. 4. Students find colored pictures of jobs, and workers they like and want to be. 5. Pictures of mother's and father's jobs. 6. Cut them in patterns leaving border - hang on walls to brighten room.	Colorful magazines, newspapers, books, glue, construction paper	

GRADE 3-5 SUBJECT AREA Health

CONCEPT Careers in Pharmacy.

SUBCONCEPT A comparison of jobs long ago and today.

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
To develop a better understanding of the job of the druggist or pharmacist, children will name - places where pharmacist work, children will state duties of a pharmacist's responsibility to the community, children will list education needed to become a pharmacist.	Field trip to Penny's Pharmacy. Fill empty capsules with sugar. Discussing the machine used to count the pills. Listening to the resource person. Look up the use of medicines long ago. How capsule got its name. Visit Calcasieu Imperial Museum to see display of early pharmaceutical supplies.	Druggist Capsules Modern Workers	The children were very interested and learned a lot about the duties of a druggist. The field trip was rewarding and helped the children understand better what we were talking about.

GRADE 3-5 SUBJECT AREA Health (Language Arts)

CONCEPT Work and good work habits are necessary.

SUBCONCEPT Adventure in World of Careers.

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
1. Children will list reasons why health is important to our work. 2. Students will construct bulletin boards, charts, and booklets to show importance of good work habits. 3. Children will exhibit cooperation in classroom projects to show significance of cooperation in the world of work.	16 mm film - Why Fathers Work, filmstrip viewed Discussion, Write original story what you might want to be and why health would be important. Trace cooperation needed to make a shirt. Filling a check list - concerning himself. Bulletin board showing types of jobs available. Pantomine - Careers used as games - each student tells only the teacher they are divided into two groups and they compete against each other.	Five sound filmstrips in Adventures in World of Careers See page on back of this check list Dictionary Occupational Titles SRA Handbook of Job Facts Parents and Resource Personnel	Sincerity at which students work- Consider neatness and completion of tasks as well as cooperation with others.

GRADE 3-5 SUBJECT AREA History

CONCEPT Careers Change

SUBCONCEPT As Knowledge Increases, New Types of Workers are Needed or Retrained

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
1. Students will list in writing the ways of producing goods and how jobs have changed.	1. Students read in encyclopedia, other books about: a. spinning b. blacksmithing c. weaving d. leather tanning e. milling of grain f. shoemaking, others 2. Let students explore the many ways these jobs have changed, what caused this change. 3. Guide students to see machines are used, therefore, involving more people, greater production, better products, and progress is necessary. 4. Visit a modern bakery. 5. Ask horseshoer to visit class. 6. Visit carpet factory.	Encyclopedias American History Books Calcasieu Imperial Museum	

GRADE 3-5 SUBJECT AREA Language Arts

CONCEPT Self

SUBCONCEPT An Awareness of ones self as a distinct person and is important in identifying in individual interests, abilities, and aspirations

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
Individual student will list in writing three ways he is different from others in addition to name and address.	1. Initiate a discussion pointing out how each individual is different. 2. Have children describe each others personality and physical characteristics. 3. Pupils will begin book - All About Me. 4. Write sentences about hobbies and interests. 5. Write sentences about family. 6. Put in poem, stories student has written. 7. Illustrate sentence with pictures the student has drawn or cut from magazine.	ALL ABOUT ME Magazines	Does the student know himself as to interests, abilities, and aspirations?

GRADE 3-5 SUBJECT AREA Language Arts

CONCEPT Awareness

SUBCONCEPT Self interests

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
1. Children will answer- When I look at myself what do I see? 2. Children will list things they like and dislike about themselves.	Listen to A Very Important Question: 1. Answer the question for discussion - teachers guide. Time set aside each week in class - 5 or 10 minutes called My Time, where the children might think about themselves. Discussion Photoboards 1, 2, 6, 34, 35 Draw pictures to answer this is me doing something. Write answer to: The things I like about myself, The things I don't like about myself.	SRA-Focus on Self Development, Stage II-Responding Unit A Self-Concept Hand mirror or full length.	

GRADE 3-5 SUBJECT AREA Language Arts, Art

CONCEPT Self Awareness

SUBCONCEPT A person's work may contribute to a positive concept of self.

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
The students will identify and discuss how an individual may obtain personal satisfaction from his occupation. Because of this situation they are able to do a better job.	The student will look at filmstrips about various occupations. Then he will discuss ways a worker may get satisfaction from his job. The students interviewed people and came back and discussed their jobs and how they were satisfying to them. Listen to stories about workers. He will discuss these jobs. Students will make a booklet on what I want to be.	Sound filmstrips Resource people Tapes Encyclopedias Magazines The Workers Series Youth Dynamics (by Cornet) Tapes & Stories from Jack & Jill, My Father Is	This also seems to work well. The students said as a result of this some of them decided on what they wanted to do as a life's vocation. Some of them changed their minds from their original plans and decided on something else in which they felt they were best suited. All realized the importance of doing ones best on any job.

GRADE 3-5 SUBJECT AREA Language Arts, Social Studies, Art

CONCEPT Career

SUBCONCEPT Hobbies and interest may lead to a vocation.

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
Each child will list hobby and interests.	Children will name activities at home or school or community they enjoy. The teacher will list them on the board. Discuss hobbies and interests: 1. What is a hobby? 2. Do you have one? What interest led you here? 3. What hobby or interest would you like to develop? Each child cuts pictures of interests for booklet- use an interest questionnaire and invite a resource person to come and discuss how his hobby and interest led to his occupation. 4. Name a committee to take tape recorder and interview a person (continued)	SRA Handbook of Job Facts, Dictionary of Occupational Titles News Papers, Magazines Yellow Pages of Telephone Directory Chamber of Commerce	The interest children show- the projects that develop will show how interest may lead them to a vocation.

GRADE 3-5 SUBJECT AREA Language Arts, Social Studies, Art

CONCEPT Career

SUBCONCEPT Hobbies and interest may lead to a vocation. (continued)

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
	whose hobby led to life's work. 5. Let students who care to interview someone on a job that interests them.		

GRADE 3-5 SUBJECT AREA Language Arts, Science

CONCEPT Career

SUBCONCEPT Workers for the telephone company.

BEHAVIORAL OBJECTIVE.	SUGGESTED ACTIVITIES	SOURCES	REMARKS
1. Students will list workers for South Central Bell Telephone Co. 2. Students will list duties of each worker.	1. Students will discuss the importance of telephone and service it renders. 2. Students will ask parents for names of workers for South Central Bell. 3. Counselor will contact public relations office for resource personnel such as lineman, operator, etc to talk with children when on sight visitation is made. 4. Discuss manners on telephone. 5. Simple operation of telephone.		Do the children understand the telephone is strictly service orientated and many jobs as well as people are involved in its success?

GRADE 3-5 SUBJECT AREA Math

CONCEPT Specific knowledge for careers

SUBCONCEPT Essential knowledge of math for careers.

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
Students will be able to list orally three occupations in which the knowledge of math is essential and be able to explain why.	1. Ask each student to write a short paragraph explaining how each member of his family uses math in their daily life. 2. Together class will compile a list of workers and the way in which these workers use math.		

GRADE 3-5 SUBJECT AREA Science

CONCEPT Changes in earth.

SUBCONCEPT Unit on Dinosaurs. People who study earth and its changes.

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
Children became aware of how the earth was millions of years ago. Awareness of environment through use of the senses. Children will construct diarama of earth a million years ago and now.	Stories of dinosaurs Filmstrips Use clay to make different dinosaurs Speaker Reports Diaramas Resource Person Geologist Archeologist	Album of dinosaurs by Tom McGowen	Much interest was shown. Learned about our environment.

GRADE 3-5 SUBJECT AREA Social Living

CONCEPT World of Work

SUBCONCEPT Why People Work

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
1. Children will list three reasons why it is important to work. 2. Children will list three reasons we need money. 3. Children will make a list on chalkboard of different kinds of work.	1. Talk about why money is important. 2. Discuss how money is spent in the family. 3. Discuss how mothers and fathers like for their children to have extras. 4. Tell why someone you know works, why you will need to work. 5. How can you begin now to form good work habits.		Teacher evaluation Student evaluation Student participation Outcome of subject matter taught

GRADE 3-5 SUBJECT AREA Social Studies

CONCEPT Our Working World - Neighbors at Work

SUBCONCEPT What is a neighbor?

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
1. Child will draw pictures of nearby places to which he walks. 2. Child will list principal elements that make up a neighborhood. 3. Child will act out neighborly feelings.	1. Draw pictures of homes, stores, filling stations, places passed to and from school. 2. Display of pictures, people, land, buildings, streets. Make up our neighborhood. 3. Teacher read poems. 4. Teacher read the story - Freedy's First Day.	Our Working World Record 1 Resource Book p. 25-26 Text Neighbors at Work	

GRADE 3-5 SUBJECT AREA Social Studies

CONCEPT Jobs available in our area.

SUBCONCEPT Farming-Ranching nearby.

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
1. The children will name the jobs of a farmer-rancher. 2. List ___ reasons why farming-ranching is important in our area as a way of work. 3. Children will list two crops raised for money near Lake Charles. 4. Children will list ___ animals raised for profit in our area. 5. Children will name ways emphasis on farming-ranching has changed. 6. Children will state why soy beans and rice are successful money crops and can be raised with cattle and horses.(continued)	1. Discussion of Sound Filmstrips so that children are aware of Grain Farming Around World. Bring home our farming. Ask what has been seen. 2. Dramatization: Fatten cattle, horses for auction, receive money 3. Discuss rye, soy beans rice in different stages of growth. 4. Find information on how farming and cattle ranching in our area has changed. 5. Invite Mr. John Denison or any nearby farmer-rancher to speak to class. 6. Class visits McNeese Farm and Mr. Denison's farm. (continued)	Our Working World Revised '73 Chapter 6 Regions People, Products Places, Field Enterprise, Farming and Ranching. Fisher Price - The Farm. Books: The True Story of Cowboys Lets Find Out About Farms Original Materia Material Taped stories- My Father is a Farmer, My Father is a Cattle Rancher. Slides and tape Farm trip(continued)	Children became aware of farming-ranching and related jobs as a way to earn a living in our area. The views of children changed about farming and ranching in our area.

GRADE 3-5 SUBJECT AREA Social Studies

CONCEPT Jobs available in our area.

SUBCONCEPT Farming-Ranching nearby. (continued)

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
7. Children will list money crops of fifty years ago. Tell why they are no longer money crops. 8. Children will list ___ jobs related to farming-ranching in our area.	7. Invite a local crop duster to tell of his work associated with farming. 8. Agriculture director in this area invited in. 9. Mural - planting in our area. 10. Visit rice dryer and crop duster jobs - note their contribution to farming.	Resource La. Flyers Morgan Crop Dusters	

GRADE 3-5 SUBJECT AREA Social Studies, Language Arts, Art, Science

CONCEPT Natural Resource

SUBCONCEPT Hercules - Gas to plastic

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
1. Students will list many jobs available at local Hercules Plant. 2. Students will list products made at Hercules and process used. 3. Students will list two reasons for the safe disposal of waste materials from plants.	1. Take inventory of where children's fathers work - or someone they know that works. 2. Invite Personnel Director to speak to the class. 3. Field trip to plant - parents, teacher, children. Original Materials 4. Colored slides and tape - Jobs at a plant. Tape of Personnel Director's talk and outline - Tape of field trip. 5. Art work- Mural of workers in plant. 6. With materials available construct diaramas of different jobs at the industrial plant.	Our Working World Revised '73 Oil Regions pp. 50-55 pp. 132-133 Original slides and tape made for use with unit.	Children realized value of a plant in their area. Many job opportunities offered there. Seems important to children to learn of job opportunities in their area.

GRADE 3-5 SUBJECT AREA Social Living, Language Arts, History, Civics

CONCEPT Many jobs in a city.

SUBCONCEPT Job opportunities in our city.

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
1. Children will name mayor and councilmen. 2. Children will explore type of city government. 3. Children will list jobs available in city government.	1. Discussion why it is important to have government in any city. 2. Students will hear mayor and a councilman by hearing them on cassette tape or visiting with them. 3. Committees will explore report book on sections of Code of Ordinances - why it is important. 4. View slides of all jobs available in city. 5. Hold mock city council meeting. 6. Each child will write or report orally on qualificatiions for two jobs in city of Lake Charles. (continued)	Workers Who Provide Services Cornet Our Working Worl City and Government Code of Ordinances City of Lake Charles Resource People City Councelor Mayor Original Materia Tape, slides of jobs in Lake Charles	Students can converse freely about different jobs in our municipality. This unit came about from an inventory taken after the questions: Where Do You Like? Who is Leader of Your City?

GRADE 3-5 SUBJECT AREA Social Living, Language Arts, History, Civics

CONCEPT Many jobs in a city.

SUBCONCEPT Job opportunities in our city. (continued)

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
	7. Invite city councilman to speak to the class. 8. Class may visit a council meeting.		

GRADE 3-5 SUBJECT AREA Social Studies, Language Arts, Reading

CONCEPT Careers on and near water.

SUBCONCEPT The Intercoastal Canal Ferry.

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
1. The children will see the intercoastal ferry work. 2. The children will talk with the ferry operator. 3. One student will read signs about ferry. 4. Children will tell how the ferry operates. 5. Children will list advantages and disadvantages of working on a ferry.	1. Trip to Intercoastal Ferry. 2. Increase vocabulary by reading road signs: Sweet Lake, Stop. Slow, Intercoastal Canal, Ferry, Curve, etc. 3. Talked with operator and worker on ferry about their work. 4. Pictures of trip taken. 5. Wrote our "Big Book" on return about our trip to a ferry.	Original slides Tape Unit Field Trip to Ferry	Children learn to appreciate all work.

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SUBMITTED TO ERIC DOCUMENT REPRODUCTION SERVICE.

GRADE 4-5 SUBJECT AREA Social Studies, Language Arts, Art, Music

CONCEPT Man makes a living throughout the world.

SUBCONCEPT Comparison of work opportunities Netherland and United States.

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
1. The students will compare job opportunities in the Lake Charles area with those of the Netherlands. 2. The students will name jobs or work opportunities in our area. 3. The students will name work opportunities in the Netherlands. 4. Students will name ___ things that affect these opportunities. 5. Students will construct maps and charts illustrating work opportunities in both countries. 6. Students will compare lyrics for original song.	1. Students will do research on both areas. 2. Students will write and present skits comparing and contrasting life and work in both areas. 3. Students will divide in groups and make charts, maps and pictures illustrating work opportunities in both areas. 4. Students will bring to class models of some of the things most prevalent in the area chosen. 5. Students will make up a song depicting how even though there is a difference in both areas there is still harmony.	World Book Encyclopedia Textbook Learning to Look at OUr World Tourist Bureau Chamber of Commerce Lake Charles Telephone Directory Lake Charles Library	Children learned to appreciate the difference in job opportunities in different countries. Much information gained through research and activities.

GRADE 3-5 SUBJECT AREA Social Studies, P.E., Language Arts

CONCEPT Many people

SUBCONCEPT Jobs at school

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
1. To help the students become aware of the different jobs in their own community, students will name at least ___ ways of work or jobs within their school. 2. Students will name ___ jobs or ways of working within walking distance of their school. 3. Note jobs in the city, state, and nation.	1. Make booklets on community workers. 2. Play a pantomine game with pictures of the community workers 3. Make booklets on workers. 4. Creative writing: My dad is (may be) a ________. I know a (man, woman) who is a ________. 5. List some descriptive adjectives about a community job, then let the class guess. 6. How can one make a living being of service to the community?	Pictures of community workers. Students Booklets Parents Friends Neighbors	The class enjoyed this game. It gave them an opportunity to do more than just work. They were able to point out that many of the jobs were being done in their own community. We also brought in a job we saw on our field trip. (Taxidermy)

GRADE 3-5 SUBJECT AREA Social Studies, Science

CONCEPT People work at Many Jobs - Natural Resources

SUBCONCEPT Fishing, Shrimping in Our Area

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
1. Children will view docking of shrimp net. 2. Children will put on life jackets for safety. 3. Children will view catch and opening of net. 4. Children will see, feel the shrimp. 5. Children will head shrimp. 6. Children will eat shrimp and crabs. 7. Children will view lake. 8. Children will see the area where shrimp are caught; environment where people who fish for a living reside. 9. Children will list jobs necessary for successful operation of a shrimp boat. (continued)	1. Discuss jobs daddies do, why they work at these jobs. 2. Paul's dad fishes. 3. Children asked more about fishing. Film-strip (sound) on Fishing. 4. Discussion to bring in local fishing. 5. Daddy (Mr. Richard) accepts invitation to talk with class. 6. Mr. Richard invites class to visit his boat, The Stranger. 7. Field trip to see, visit with Paul's family and fish for crabs. 8. Catch, boil, eat - crabs, head shrimp. 9. Hike to edge of lake. 10. View the area - note how the plant life (continued)	Our Working World Revised '73 Chapter III People, Places, Products Field Enterprise Publication, Inc. Fishing La. Conservationest July-August 1972 Pictures from L. C. Press Glossy Prints Colored slides and tapes developed for this unit. Resource Person from Conservation Office	Children gained information about shrimping and fishing in their area and environment. This is an example of local job awareness and can be extended to all the natural resources.

GRADE 3-5 SUBJECT AREA Social Studies, Science

CONCEPT People work at Many Jobs - Natural Resources

SUBCONCEPT Fishing, Shrimping in Our Area (continued)

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
10. Children will list things Paul's daddy must do with shrimp in order to get money for his family.	and atmosphere is different from our city.		

Supplementary Activities: Laminated and Recorded Career Stories

Stories to Hear and Read

A collection was made of many work related stories, poems, and games from many sources in many areas. These were gathered from childrens' magazines, discarded books and others. The stories were grouped together and laminated to protect them for the children. Each story or poem was then recorded on a blank cassette tape. These were placed in brightly decorated folders. Art students were happy to create the covers for the folders.

These folders were used on many occasions at "Story Time" with a small group or an entire class. These stories were read to the group by the teacher, student, or counselor. Many individual students listened to these stories individually during story time by using a tape player with earphones.

This material was used as supplementary material. These materials were used as follows:

1. If baseball was the topic of discussion or a high point of interest, the story "My Father Plays Ball for the New York Yankees" was just right. This might be followed by an exciting story of a Little Leaguer.

2. Stories in the folders were used by individual students at listening stations to encourage recreational reading. The student could both see and hear the story.

3. The laminated story material and accompanying tapes provided a source of encouragement to underachievers in reading when book reports were due. The student was often encouraged to tell one story or more as a report in lieu of a formal written book report. This gave the students a feeling of participation in class.

4. Some students often completed assigned work before others. These students were encouraged to choose a folder of material that they might like and read a short story or poem until class resumed.

5. Many rainy days were spent during recess time enjoying stories about fathers who were astronauts, ranchers, loggers, truckers and many more.

6. The stories were used in social studies area to learn about job awareness in this country and others.

7. Value stories were important. They helped to build a positive self-image for the child and the importance of getting along in a group.

8. Short poems, word games and puzzles were included to challenge the student's mind and build a positive self-image.

The teachers enjoyed using these folders and the students enjoyed the challenge.

SUGGESTED ON-SITE VISITATIONS

I. Self-Employed as a Shrimper

II. Intercoastal Ferry Occupations

III. Farming and Ranching as Occupations

IV. Workers at the Bank

V. Firemen Have Many Jobs

VI. Work of a Pharmacist

VII. Occupations in the City Hall and Civic Center

VIII. Jobs at the Police Station

IX. House Construction Sites

Thoughts for Further Development

I. Our Big Book

A. Grades K-2:

Each child may develop an experience chart, at any time during the term, concerning someone who works. This person may be a parent, friend or neighbor. This large chart contains a picture of the work which the child may draw or find and paste on the chart. A few simple statements about the work completes the chart. All the charts are collected on a stand and placed in an appointed spot. The colorful title page is "Our Big Work Book."

B. Grades 3-5:

This idea is easily adapted to the higher grade levels. A large scrap book replaces the charts and creative stories replace the statements.

II. Secondary Students' Contributions To Career Education at Elementary Level

The elementary school staff can work cooperatively with interested students from the secondary level who have particular interest and expertise in industrial arts, home economics, and agriculture, etc., in order to develop projects emphasizing career education concepts. The secondary students may aid in developing projects such as: (1) arts and crafts; (2) preparation of simple foods; (3) planting seeds and plants; and, (4) campus beautification.

III. Community Helpers

Try to develop interest in community helpers that are seldom considered. These may be (1) Telephone Company, (2) United Gas Corporation; (3) Gulf States or other electrical service companies; (4) the City or Rural Recreation Department; and, (5) communication media.

IV. Ideas for Career Development in Rural Areas

A. Fertilizer and seed industries

B. Farm equipment sales and service companies

C. Jobs pertaining to local agricultural agencies

D. Shipping and marketing of local farm products

E. Dairying

F. Farm Service Companies

1. Dryer facilities
2. Air services
3. Water source services
4. Pest control

V. Small Manufacturing

Bakery: This is a very good example of making and selling a product for a profit.

VI. What's Happening in Our School in Career Education

This project can stimulate interest in career education and may serve as an instrument for public relations. A large scrap book is placed in the teachers' lounge. Examples of outstanding, interesting and creative career education work from all grades are placed in the book. These might include: (1) action snapshots; (2) reports of field trips; and, (3) creative stories, etc. Vistors can see at a glance one phase of the career education project in action.

VII. Ideas For Bulletin Boards

A. Book week - caption might be: "Books Help Us Be What We Want to Be." Use book covers or pictures of such books as "Come to Work With Me in a Toy Factory", "I Want to Be a Nurse", and "Night Workers."

B. Month of March - Fly High:

Display fifteen (15) kites with the titles of the fifteen (15) clusters. The strings are held by children below the caption, "Fly Your Kite High."

C. News You Need: Arrange an attractive display of news want-ads listing the type jobs available in your area, and others. Use as sources of information local newspapers and bulletins. Acquire newspapers from other areas and compare jobs available in your area to those available in other areas.

D. Roads of Life - Display an attractive group of winding roads each ending in a job cluster. Small pictures of jobs within the clusters may be displayed along the roads.

E. Treasure Hunt - The entire bulletin board is a maze of lines. At the beginning there is a boy and girl. The treasure chest is labeled "A Job." Clues along the way may be attendance, homework, punctuality, honesty, and many others.

VIII. Art Projects

A. Make your own sewing cards by drawing or tracing pictures of working people on cards. Use shoe strings to lace around the figures.

B. Students find very colorful pictures of people working. These are cut out very carefully and placed on small boards or cardboard. The faces are removed. In the place of the worker's face the student may place a picture of his own face. This makes a good gift.

AIDS FOR CURRICULUM DEVELOPMENT
IN CAREER EDUCATION
GRADES 6-8

GRADE 6-8 SUBJECT AREA Art

CONCEPT Leisure time activity - career implications with further interest

SUBCONCEPT Paper Mache

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
Students will develop interest and skill in art through crafts including sculpture and other art media.	Animals, banks, candle holders, bowls, candy dishes, waste baskets, sculpture, games, vases, pencil holder, trays	Must have someone who knows about paper mache'- Your supplies are: tempera paint, wheat paste, flour newspaper, wire, tape, objects, varnish	Teacher by observation of work will see children gain in self confidence through completion of projects.

GRADE 6-8 SUBJECT AREA Art

CONCEPT Career implication with talent and desire

SUBCONCEPT Block printing.

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
Students will make greeting cards, name plates, or pictures to be framed through the media of block printing.	Projects wrapping paper, greeting cards, pictures	Linoleum bleach, brayers, ink, linoleum cutters printing paper.	Talent, interest or career implication may ensue.

GRADE 6-8 SUBJECT AREA Art

CONCEPT Leisure time activity with career implications.

SUBCONCEPT Bottle cutting.

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
Students will cut bottles and make useful objects from them.	Cut bottles with bottle cutter - make bowls, glasses, mugs, - are only limited by you and children's imaginations.	Bottles anyone that will give them to you. Bars are good sources. Bottle cutter.	Interest, hobby, or career may be developed through this art media.

GRADE 6-8 SUBJECT AREA Art

CONCEPT Career implications if student has desire and talent.

SUBCONCEPT Charcoal

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
Student will use an inexpensive tool which allows much freedom of expression. The student will learn the use of contrast in blacks, grays, and whites.	Student can do own thing. Copy another picture, draw an object.	Materials: charcoal, erasers, newsprint.	Creativity may be developed with perhaps career implications.

GRADE 6-8 SUBJECT AREA Art

CONCEPT Career implication if student has desire and talent

SUBCONCEPT Water color and pastels.

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
Students will practice working with an inexpensive media which yeilds an attractive finished product.	Water colors: Students will take care of paint brushes. Sudents will use water colors in cake and tube. Students will mix colors in order to achieve desired shade of tone.	Materials: pastels, newsprint, plaster spray Brushes, water color paper, color, moist, semimoist.	

GRADE 6-8 SUBJECT AREA Arts and crafts.

CONCEPT Candlemaking as a career and as a hobby

SUBCONCEPT Wise use of leisure time in candlemaking.

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
Students will develop skill in candlemaking through hands-on-experienc	Candlemaking to be taught in regularly scheduled classes by instructor with emphasis placed on use of inexpensive materials.	Art lab and teacher's instructions.	Through actual candlemaking interest in hobby or career may be developed.

GRADE 6 SUBJECT AREA Business Typewriting

CONCEPT Typewriting - a key to career choice - a useful skill.

SUBCONCEPT Teaching of proper techniques.

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
Students through actual hands-on-experience will become acquainted with subject area of typewriting and its personal use as a tool in daily life as well as its use as a key to many career choices.	Daily lessons and practice on typewriter to build proper typing techniques.	Typing Lab	Teacher observation and evaluation by checking work results.

GRADE 6 SUBJECT AREA Needle Craft

CONCEPT Leisure time activity - Career implications (boys and girls).

SUBCONCEPT Embroidery

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
Children will develop skill in using needle to hem cup towels, and in embroidering, as well as in the textile paint crafts.	Students will hand hem cup towels. Will design own design for cup towel and either embroider or use textile paint on cup towel. Also do same type of work on sweat shirts, jeans, pillow cases, pin cushions, aprons.	Unbleached muslin for cup towels, hoops, needles, thread textile paint, blotter hoops.	Interest, hobby, or career may develop from exposure to these skills.

GRADE 7 SUBJECT AREA Needle Craft

CONCEPT Leisure time activity with career implications.

SUBCONCEPT Crewel Embroidery and knitting

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
1. Students will select and knit suitable object to demonstrate knitting skills. 2. Students will choose and design an item to demonstrate basic crewel stitches, color and yarn used in crewel embroidery.	Students may select a picture, pillow top, pin cushion, to crewel embroidery. They may do new design or purchase one already designed. In knitting they may do a purse, slippers, belts, or any suitable object.	Needles, linen material, crewel embroidery thread, knitting needles, yarn.	Interest in these skills may be awakened by performing these crafts.

GRADE 6-8 SUBJECT AREA Needle Craft

CONCEPT Leisure activity with career implications.

SUBCONCEPT Advanced embroidery, knitting, and crochet.

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
Students will learn to follow a pattern. Students will learn advanced embroidery, knitting, and crochet techniques.	Students may select advanced knitting or embroidery projects to include any possible project that can be completed.	Students will provide materials for this elective and advanced course in crafts	Through advanced instructions in these crafts students may use them functionally.

GRADE 6-8 SUBJECT AREA Needle Craft

CONCEPT Careers

SUBCONCEPT Ways in which needle crafts can be a career.

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
The students will list four activities that hand craft instructor in a local department store performs.	Have an instructor from a local department store come and talk to the students about her job. Do some reasearch on needle work teachers and shops in our country today. Plan a field trip to a local needle craft store. Let the children make a bulletin board listing reasons for interest in needle work.	Local Department Store Local Needle Craft Store Occupational Outlook Book Jobs in Needle Work	

GRADE 6-8 SUBJECT AREA Band

CONCEPT Career Education

SUBCONCEPT Careers in band.

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
Students will relate band with jobs.	1. Discussion a. teacher-pupil centered 2. Resource person a. band directors (1) college (2) high school 3. Films 4. Filmstrips 5. Research work - use of library - Encyclopedia 6. Field trips - McNeese State University - Local High Schools. 7. Students design and arrange band settings-after researching for demonstration purposes.	1. Teacher 2. Resource persons 3. Films 4. Filmstrips 5. Field trip 6. Library 7. D.O.T.	Students will describe and demonstrate as many things that will be required and necessary for understanding the function of a band director.

GRADE 6 SUBJECT AREA Business Careers

CONCEPT Careers

SUBCONCEPT Self development for career choice.

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
The student will answer a telephone in a business manner.	If possible secure two telephones - toy ones will do. Let children take turns - one calling and one answering. Explain to them the proper procedure in answering, calling, taking a message. Might work out arrangement where students can get practical experience answering the telephone in the office.	South Central Bell Any book with information on business procedures.	

GRADE 6-8 SUBJECT AREA Business Careers

CONCEPT Careers

SUBCONCEPT Self development of skill for career use.

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
The child will be able to follow directions to enable him to fill out social security form. Mail them and receive his social security number in the mail.	Help child fill out social security card. Explain why and who needs them. Also death and retirement benefits. Can mail them or return to office and children will get them in mail.	Social security cards at Social Security Office. Other materials from Social Security Office.	

GRADE 6 SUBJECT AREA Business - Typewriting

CONCEPT Exploration in typewriting

SUBCONCEPT To develop skills in typewriting and awareness of business area.

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
Through daily classes for a six-week period students will develop skill in typing, thus; becoming aware of interest in subject area to be expanded towards a career if interest and ability so indicate.	To learn to control key board through daily practice on typewriter and proper typing techniques.	Typing Lab.	Teacher will check written work and speed.

GRADE 6-8 SUBJECT AREA English

CONCEPT Careers

SUBCONCEPT Students will investigate the value of good school habits as related to job habits.

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
Student will be able to list school traits that are of carry-over value in the world of work.	Students are to write paragraphs telling what good school traits can also be good job traits. Take up themes - now list on blackboard and discuss various traits as to why they would be an asset in a job. 1. Punctual 2. Doing work on time 3. Listen List can go on and on.		Teacher will grade paragraphs. Teacher will lead and direct discussion.

GRADE 6-8 SUBJECT AREA English

CONCEPT Careers

SUBCONCEPT Student will have practical experience in filling out job application.

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
Student will fill out a job application. Student will list three reasons why it is so important to do a good job filling out a job application form.	From local industry secure application blanks. Mimeograph copies for your students. Let them fill out applications. Stress correct spelling, correct information, completing forms and neatness. Try to do several different kinds of forms. Have someone in personnel from industry or business come and talk to students on importance of application forms.	Application forms from local industry. Speaker from personnel to talk to students.	Teacher observation of students working on applications.

GRADE 8 SUBJECT AREA English

CONCEPT Occupation awareness

SUBCONCEPT Listing qualifications and activities for an occupation.

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
1. The students will write the names of ten occupations. 2. Two qualifications will be listed for each occupation named. 3. Students will be able to write three activities that an employee must perform for each of the ten occupations listed.	Have the students write a short composition on one of their parent's occupations. Discuss fifteen of these compositions in class.	Career Information Kit Occupational Exploration Kit Occupational Outlook Handbook	Pre-test and post test; Use an objective instrument that is open-end where in the three objectives are met.

GRADE 8 SUBJECT AREA English and Reading

CONCEPT Occupational Awareness

SUBCONCEPT Student will realize the vast number of occupations and many different qualifications.

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
1. Help students become aware of the many different careers. 2. Encourage students to start thinking and planning for their future. 3. Help students realize the present needs to fulfill their ambitions.	1. Have students write a composition on one of the parent's occupations and discuss. 2. Have students write a composition on what they would like to do when they become adults and discuss the present needs to fulfill this future ambition. 3. Read different stories about occupations and careers.	Library Parents Exploration Kit Occupational Outlook Handbook	Observe likes and dislikes of different students which occupations hold the most interest, why some choose the careers they do.

GRADE 6-8 SUBJECT AREA French

CONCEPT Career

SUBCONCEPT Investigate career opportunities as French interpreter.

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
Student will list education, training and duties needed to become a port interpreter of the French language.	Invite French interpreter from port to talk to the class about his job, training, and education.	Lake Charles Port Interpreter	Have students write a short paragraph for Career Education folder.

GRADE 6-8 SUBJECT AREA French

CONCEPT Career Education

SUBCONCEPT French as a means of communication in the world of work.

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
The student will understand that the French language is important in communication in their locality.	Teach discussion and point out: Communication in French is based on people in the area. Jobs available. Students discuss after library work the relationship of French in their locality. Field trip to a French speaking community in Southwest Louisiana. Plays and skits in French. Visit from French group-Speaker - interpreter.	Teacher Library Resource persons Field trip D.O.T.	Students prepare and present a 20-30 minute skit using French as the basic language.

GRADE 6 SUBJECT AREA Geography

CONCEPT Occupations in transportation.

SUBCONCEPT Jobs at local port.

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
Students will list four occupational positions that exist at the local port. Ten jobs related skills (activities) possessed by port employees that will be named by the students. Students will write the names of five products shipped to or from the port. The students will list three needs that are shared by people living in countries that have ocean ports.	Class field trip to a local port; pre-trip and post-trip discussion. Construct a model of a port, include several activities one might expect to see.	Port employees Geography text Books about shipping or ports.	Pre-test and post-test; use same instrument for both; include elements from objectives. For Model: Pre-test and post-test in terms of objectives; evaluate efforts expended on model-not the excellence demonstrated in construction.

GRADE 6 SUBJECT AREA Geography

CONCEPT To view people at work. To understand geography in world-wide affecting all people.

SUBCONCEPT Jobs and how climate and rainfall determine peoples lives.

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
To acquaint the pupils with different skills involved in port or dock work. To become aware of the products shipped in and out of the port. To become aware of how workers perform on the job. To bring to reality the geography concept that peoples needs are the same the world over. To help motivate the pupils in applying education to employment.	We discussed the purposes of the trip. We talked about what to look for - unloading goods, warehouse storage, men at work, etc. We discussed the importance of following directions while there to obtain the greatest benefits. We had a speaker follow-up to answer any questions arising from their visit. We wrote a letter to the people expressing our appreciation.	Geography study-book Parental help Career Education instructor Guides and manager at the port.	I feel that the children thoroughly enjoyed the chance to see geography and vocations come alive. The knowledge they acquired that afternoon is immeasurable in comparing a text-book to actual participation. They couldn't find an end to their numerous intelligent questions. This in itself is proof of their intense interest. I am glad they had this opportunity to go on this field trip.

GRADE 6-8 SUBJECT AREA History

CONCEPT Careers

SUBCONCEPT Value of career information.

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
Student will become aware of the need of exploration in vocational choice.	After reading the unit let the students list every job found in the unit, then let them orally make the list of jobs they are aware of today. What does this tell you? Back then everyone knew all the skills involved in every job available because the number of jobs were not great. Today occupational structures are so big and complex we need to spend your exploring just to become aware of our interests.	Sixth Grade History text Unit I Earth Earliest People	

GRADE 6-8 SUBJECT AREA History

CONCEPT Careers

SUBCONCEPT Freedom of vocational choice in America.

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
Student will explore freedom of choice of vocation in America.	Discuss freedom in relation to jobs and choice of jobs in America. All of American children have the opportunity for an education. Discuss ways minority groups are protected. Can contact U. S. Labor Department to furnish materials on various laws for minority groups.	History of Our United States Unit U. S. Labor Department	Students will write a short paragraph on vocation choice in U. S. as compared with Russia.

GRADE 6-8 SUBJECT AREA Home Economics

CONCEPT Career

SUBCONCEPT Alteration in our daily world of work.

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
1. The student will list the important aspects of alteration as related to daily living and its relationship to the various clothing stores in their locality. 2. The student will identify the different types of businesses involved in using alteration in their locality. 3. The student will identify the job of the seamstress.	1. Students remove and sew buttons. 2. Students discuss and learn how to measure for sizes. 3. Students do hemming and stitching. 4. Visit from resource persons a. Discussion b. Question and answer periods 5. Students take field-trips to local department stores, cleaners, and etc., and take pictures, make slides of people doing alteration work.	1. Teacher 2. Students 3. Resource persons 4. Magazines 5. Patterns-Buttons Material 6. Films 7. Filmstrips 8. Field trip	1. Students measure to judge cost and fit of garment. 2. Students bring shirts, trousers, and etc. to class and rehem them to show that they understand alteration. 3. Students gained skills in simple stitching which is necessary to sew.

GRADE 8th SUBJECT AREA History (La.)

CONCEPT Careers

SUBCONCEPT Career opportunities in city government.

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
Student will be able to write an organizational chart of jobs in our city and list two duties of each job.	Present organizational chart to class - let them pick an area of interest- they are to secure additional information on each area and report back to class. Mayor's office will send you a speaker at the end of the unit. You can arrange trip to city hall and sit in council chambers and view various offices	Mayor's office Secure list of city employees and government officials and their duties from Mayor's office.	

GRADE 7 SUBJECT AREA Home Economics

CONCEPT Exploring Careers

SUBCONCEPT Careers in Home Economics and related fields.

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
1. Students will report on opportunities available for future careers. 2. Students will list ways in which interests, abilities, and family desires affect career choice. 3. Students will explore and list careers related to the field of home economics.	Use interest and ability questionnaire attached hereto. Career guidance counselor to speak to group and hold group discussion on the following topics: interests, abilities, family desires and effects on career choice. Students will have access to materials to career education resource room and school library from which to prepare list of related home economic careers.	Teacher-make interest inventory attached. The counselor or Teacher. 1. Career Ed. Resource Room 2. Library 3. Dictionary of Occupational Titles	Interest and abilities to be tabulated and evaluated by student. Counselor will lead and direct group discussion. Students to read prepared lists to share and to exchange information on careers related to home economics.

GRADE 7 SUBJECT AREA Home Economics

CONCEPT Career Education

SUBCONCEPT Relationship of Home Economics to job finding (Exploration).

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
The student will demonstrate what a maitre d'hotel, waiter, and waitress does in the world of work.	1. Table manners 2. Activity centered around planning and serving meals. 3. Actual experience. 4. Students learn table setting for various types of functions. 5. Visit from a head waiter or waitress a. Lecture b. Knowledge needed c. Jobs d. Discussion - question and answer period.	1. Teacher 2. Textbook 3. Magazines 4. Resource persons	Students prepare and served meal to parents. Students gained knowledge on how manners add to growth and maturity.

GRADE 7-8 SUBJECT AREA Home Economics

CONCEPT Career Education

SUBCONCEPT

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
1. Through experimenting with various hair styles, the students will become aware of the importance of good grooming, necessary for careers such as an airline stewardess, model, saleslady, and etc.	1. Students study mode of personal hints that lead to being a well-groomed person. 2. Activities include trying new hair styles, studying shapes of the human face, types of clothes most suitable, height, weight, and body build. 3. Films and filmstrips of jobs pointing out good grooming, but with teacher emphasizing that good grooming is necessary in all of our lives.	1. Teacher 2. Students 3. Magazines 4. Newspapers 5. Textbook 6. Resource people a. Airline Stewardess b. Buyer-Fashion co-ordinator from department store.	The girls become more aware of the importance of being well-groomed in the various career fields.

GRADE 6-8 SUBJECT AREA Language Arts

CONCEPT Occupation Awareness

SUBCONCEPT Job Qualifications

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
1. The students will name four sources of possible employment in terms of regular publications. 2. Students will list four occupations frequently sought through publications. 3. Each student will be able to write a job description for a classified ad in a newspaper.	Divide the students into four committees. Divide a bulletin board into four parts or provide a bulletin board for each committee. Each committee is responsible for newspaper and magazine clippings for the bulletin board. Discuss these clippings in class, and emphasize source, occupation, and job description.	Newspapers Magazines	Pre-test and post-test; use an instrument that includes the three behavioral objectives.

GRADE 6-8 SUBJECT AREA Self-Development

CONCEPT Self Awareness

SUBCONCEPT To build a positive self-image and self-understanding.

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
The student will discover and disclose his own interests by interviewing his partner and in turn being interviewed.	Student will interview partner relative to his hobbies and interests, and in turn will also be interviewed. Students will introduce partners to class describing hobbies. Class will discuss hobbies and relate specific hobbies to potential careers.	Resource Room	All students participate in discussion in relating hobbies and interests to careers.

GRADE 6 SUBJECT AREA Language Arts

CONCEPT Thinking of Clusters

SUBCONCEPT What I Might Want to Be (Interviewing persons and their jobs)

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
1. Student will list fifteen job clusters. 2. Committee reports on type of jobs in each cluster. 3. Student will operate cassette tape player.	1. Student chooses one cluster. 2. Reports on type of jobs - choose one - looks into qualifications: a. physical b. educational c. salary d. requirements, etc. 3. Student makes a poster to help in his presentation to class. 4. Add to Career Ed. Booklet or folder. 5. Student will practice interviewing each other about an imaginary job. 6. Selected students will interview school personnel, then a worker on the job.	SRA Handbook of Job Facts; Dictionary Occupational Titles; Popeye Funny Books of fifteen clusters Personal interviews.	Children will be able to classify in general many jobs according to clusters.

GRADE 6 SUBJECT AREA Values of School

CONCEPT Career Education

SUBCONCEPT How school subjects are related to occupations.

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
To acquaint pupils with the value of every day education. To form an association between worth while school goals in equipping oneself for a job. To cause the child to begin formulating interests in subjects leading to occupational goals.	Viewing of filmstrips. Discussion.	Filmstrips: What are Job Families What Is a Job What Do You Like To Do What Good Is School	The pupils were alert, interested and participated fully in the discussion. This helped them to relate schooling to jobs. They asked to view more films on the same line.

GRADE 7 SUBJECT AREA Language Arts

CONCEPT Career Education

SUBCONCEPT Understanding the information requested on an application.

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
The students will understand the importance of answering correctly what is asked on an application form.	1. Field trip to employment office. 2. Reading various applications. 3. Looking at repeated questions. 4. Evaluating poorly constructed application forms. 5. Use dictionary to decide on a meaning if necessary.	Chamber of Commerce Employment Office Englist textbook Dictionary	Child will fill out an application form.

GRADE 7 SUBJECT AREA Language Arts

CONCEPT Career Education

SUBCONCEPT Understanding the purpose of classified ad section.

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
The child will use the classified section of newspaper to seek employment.	1. Mock job hunting. 2. Reading an ad section. 3. Listing talents in order to use a "job wanted" ad. 4. Using telephone. 5. Use yellow pages of telephone directory.	Newspapers Teacher Students D.O.T. Telephone Directory SRA Book of Job Facts	Child will apply for employment under "job wanted."

GRADE 8 SUBJECT AREA Language Arts

CONCEPT Self and Careers

SUBCONCEPT Attitudes and values (worth having, worth working for).

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
The student will learn to identify attitudes and values of life that are helpful toward success.	Let students discuss their attitudes and values toward life. How to meet disappointment. When should you quit trying? Whole story can be tied to work, life and success.	Song of Years 8th Grade Text Exploration Through Reading	Students will write a paragraph discussing how he or she feels about statement - "Life is what ever you make it"

GRADE 8 SUBJECT AREA Language Arts

CONCEPT Career Education

SUBCONCEPT The interview is a measurement for hiring.

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
The child will understand purpose of an interview.	1. Mock interviews within the class 2. Mock interviews on campus 3. Seek real summer employment 4. Seek youth employment on or off campus. 5. When and where to take notes.	Church heads Faculty members English text Library Films	Child will be interviewed by faculty members, pastor of church, or school supervisor.

GRADE 8 SUBJECT AREA Language Arts

CONCEPT Career Education

SUBCONCEPT Establishing career status very early.

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
Each child will make talent identify as early as possible - the basis of a career.	1. Using typewriter 2. Make speeches 3. Viewing films 4. Career day on elementary level 5. Field trips - Mortuary, Plumbing Companies, Electrical Plants, etc. 6. Listing persons who started early in their careers.	People according to careers chosen by children. Counselor Teacher Principal D.O.T. (films) listed under careers Faculty	Child makes talent identify early through what he can do best.

GRADE 8 SUBJECT AREA Language Arts

CONCEPT Careers

SUBCONCEPT World of sports has many jobs.

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
Students will learn that there are many vocational choices in sports besides being a professional player.	About baseball - suppose you love baseball, but can't be a big league player.	The Milk Pitchers	Student will list jobs found in baseball besides that of professional ball player.

GRADE 8 SUBJECT AREA Language Arts

CONCEPT Career

SUBCONCEPT Show how a job has changed with times.

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
Student will gain knowledge of the work done by a newspaper boy in past as well as now.	After students read story discuss: 1. What kind of job did Johnny have? 2. How does it compare with the job of paper boy today? a. hours b. pay c. working conditions 3. Have a boy tell about his job as paper boy. 4. Contrast what you learned about a newspaper in this story with our American Press. 5. Culminate by speaker from paper or trip to Press.	Johnny Tremain and Goblin Story in 8 grade literature text. Resource speaker or trip to American Press Exploration through Reading	Let students list orally or in writing advantages and disadvantages of working in both time periods.

GRADE 8 SUBJECT AREA Language Arts

CONCEPT Occupational Awareness

SUBCONCEPT Activities and Qualifications

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
1. Each student will name one occupation in which he is interested. 2. Student will name three skills (activities) performed by persons working in named occupation, and five qualifications needed to secure a position in the occupational area named.	Read a series of reports, articles, or stories on a particular occupation. Discuss the skills needed to perform the required task, and discuss the qualifications that are needed to secure this type employment.	Textbook; magazines, Dept. of Labor Publications; Newspapers; books.	The class will list three skills required and five qualifications of a named occupation

GRADE 8 SUBJECT AREA Language Arts

CONCEPT What good is English?

SUBCONCEPT Language in school, in leisure time and on the job.

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
1. Students through writing "help wanted" ad and letter of application had actual hands-on-experience in writing. 2. Students will study and discuss qualifications of newspapermen to become familiar with this career.	Students wrote "help wanted" ads and letters of application for the job advertised. Cassette tape "News Reporter" listened to and discussed qualifications of job of newspapermen.	Guidance Booklets What Good Is English? Career Education Resource Room.	Teacher checked and graded students written material. Students participated in teacher-conducted discussion and listening activity.

GRADE 6-8 SUBJECT AREA Math

CONCEPT Careers

SUBCONCEPT How math is used in various form by banks.

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
Student will list six bank jobs after a field trip, and will write a report on one job of his choice.	Assign reports to students on various bank jobs you and your students are aware of. Ask some one from the bank to come and talk to the class about bank jobs. Ask him to give training necessary and go from simple to difficult. Before making the trip set up bank in room. Let the students be different people - cashier, teller, note department, public relation, customers. Arrange field trip to the bank and see jobs in action.	World Book, math text, library, resource person, some parents may be bank employed, bank.	After trip is over ask each student to write a paragraph on the job or jobs that he was not aware of before the unit.

GRADE 6-8 SUBJECT AREA Math

CONCEPT Careers

SUBCONCEPT Vocational opportunities in our area.

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
Students will explore vocational choices of our area.	Secure list of estimated and projected employment for Lake Charles in 1968-1975. Let students set up two graphs - one showing those working in fields in 1968 and one showing projected employment in 1975. Then discuss the difference - let children find out why some jobs will employ more people and others less.	Lake Charles Labor Area list of current estimated and projected employment for 1968-1975. Copy attached to book.	Teacher will examine graphs and observe and direct discussion.

GRADE 6-8 SUBJECT AREA Math

CONCEPT Careers

SUBCONCEPT Lack of education and lack of skills determine whether you will be employed or not.

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
Students will analyze how unemploymnet figures compare over last ten years and what are basic causes of unemployment.	After unit on graphs - call or go to State Employment Office and get a copy of unemployment rate for Calcasieu Parish for the past ten years and reason for unemployment and make graph showing fluctuation on the graph. Discuss lack of education and lack of skills as a factor.	Louisiana State Employment Office	Students will become aware of unemployment and reasons for same.

GRADE 6-8 SUBJECT AREA Math

CONCEPT Careers

SUBCONCEPT People use math in many degrees in many jobs.

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
Students will classify jobs on basis of math skills.	Let each child select a job he is curious about. As his assignment he is to find out everything he can about the math used in that job. Make a chart. Let each child use a picture or drawing depicting his occupation. Show needed math skills on it.	Interviewer World Book Library	Teacher observation of class discussion and display.

GRADE 6-8 SUBJECT AREA Math

CONCEPT Careers

SUBCONCEPT Value of math.

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
Students will become aware of great need for math through listing mathematical knowledge needed during just one day.	Let students list things you do as you go through a normal day when you must have a knowledge of numbers: 1. Tell time 2. Cook breakfast 3. Telephone 4. Catch the bus 5. At a store 6. Lunch money 7. Radio and T.V.	Knowledge of student and teacher	By observing students where they were aware of the value of numbers.

GRADE 6-8 SUBJECT AREA Math and Business Careers

CONCEPT Careers

SUBCONCEPT Self development.

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
Student will make a bank deposit, balance check book and write a check.	Show children how to write a check - how to make deposit and how to balance bank book. Give each child a figure for deposit. Set up expenditures and let pay out in checks and balance check book. Give information on how to open checking account.	Blank checks, deposit slips. Bank book - from local bank.	

GRADE 6-8 SUBJECT AREA Music

CONCEPT Career education in music and related fields.

SUBCONCEPT Awareness implications of music careers.

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
Students will participate in listening activities, in viewing sound filmstrips, and in subsequent discussion on career opportunities related to the field of music.	Tape entitled, "Musician - Choosing a Profession" series to be played for a discussion. M.E.N.C. sound filmstrips to depict the music career opportunities.	Career Education Resource Room McNeese Library	Discussion will be conducted on tape cassette "Musician - Choosing a Porfession" The greatest number of opportunities in music education to be described as follows: public school music instructor, private school music instructor, college music librarian.

GRADE 7th SUBJECT AREA Math

CONCEPT Career Education

SUBCONCEPT Banking procedures

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
1. Students will demonstrate procedures involved in checking accounts and making deposits. 2. Students will prepare deposit tickets in correct form. 3. Students will write checks and reconcile the bank statement.	Prepare an exhibit of materials collected from banks including checks and check books, deposit slips, deposit receipts or pass books, signature cards and other printed materials relating to customer account services. A film explaining the procedure in opening a checking account and the importance of checking accounts to individuals and businessmen. Assign related math problems that provide practice in filling out checking accounts, deposit slips, signature cards, and writing checks properly.	Text books, film, filmstrips business math book, general business book, materials from local bank.	Students will demonstrate how well they understand opening a checking account by their ability to solve problems assigned.

GRADE 7th SUBJECT AREA Math

CONCEPT Career Education

SUBCONCEPT Installment buying.

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
1. Students will name items that are commonly bought on the installment plan and the reason for such purchases. 2. Students will tell the difference between installment buying and ordinary credit buying. 3. Students will compute the cost of buying on installment.	Students and teacher will bring examples of installment contracts to show class. Read and study statements from an installment contract and explain their meaning. Teacher will assign related practices or exercises which will show how to compute the cost of buying on installment. Students will make a list of unfamiliar terms used in installment contracts and define terms. Class discussion will reinforce students' understanding of installment buying. Students visit a loan agency. Resource personnel visit school and discuss and answer questions.	Materials from local business establishments, textbooks, business math book, general business book, films, and filmstrips, field trip.	Students will discuss installment buying and how it differs from ordinary credit buying. Students will compute cost in problems assigned. Students will set up a mock business establishment and carry out a business transaction between buyer and seller.

GRADE 8th SUBJECT AREA Math

CONCEPT Career Education

SUBCONCEPT Preparing and living by a budget.

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
The student will be able to prepare a budget based on wages earned from his chosen job.	Students list all possible bills such as utilities, house notes, rent, car notes, etc. Teacher gives added information through class discussion.	Teacher, students newspapers, radio, magazines, television.	Each student will submit a budget, and class discussion allotted.

GRADE 8 SUBJECT AREA Math

CONCEPT Career Education

SUBCONCEPT Wages of people involved in our world of work.

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
The student will figure wages for a day, week, month, and year based on hourly pay using job of his choice.	Have students pick jobs. Teacher suggests approximate hourly wage. Students compare wages (hourly) of different jobs. Teacher stresses skill and knowledge needed for job.	Textbook, D.O.T. Labor Union scales	Each student will give a summary of his designed job.

GRADE 7-8 SUBJECT AREA Math

CONCEPT Careers

SUBCONCEPT Career education and its relationship to math.

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
The students will identify occupational areas and the basic skills needed.	Teacher set up a guideline for resource persons. a. Talk or discussion Students arrange time and dates for resource persons to visit. Each resource person will describe his occupation with emphasis on related skills in mathematics that are needed to enhance his performance.	Teacher Guest Speakers	Students will determine the importance of each job described based upon the mathematical implications involved.

GRADE 7th SUBJECT AREA Music

CONCEPT Career Education

SUBCONCEPT Careers in music.

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
The students will identify the various jobs that are related to music careers and will list all necessary qualifications.	1. Teacher has open discussion on music, (general and music education) qualifications and requirements. 2. Teacher shows films and filmstrips of: a. Various music areas b. Classical, semi-classical, jazz, and rock. 3. Teacher points out and discusses jobs in music area - (professional) a. conductor b. writer (arranger-composer) c. instrumentalist d. agent - (booking dates) 4. Band director area - (continued)	Teacher Resource People Films Filmstrips Field trip Library D.O.T.	Students will identify a job area in music, listing all necessary qualifications and requirements. Oral discussion for understanding to be presented.

GRADE 7th SUBJECT AREA Music

CONCEPT Career Education

SUBCONCEPT Careers in music. (continued)

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
	a. College - University- Junior College b. High, Junior High, and Elementary 5. Music Teachers (choral) a. High School b. Junior High, or Middle c. Elementary		

GRADE 5-6 SUBJECT AREA P.E., Language Arts

CONCEPT Job Clusters

SUBCONCEPT Ten question game

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
1. Students will list fifteen clusters	1. Ten questions asked about one cluster - do not name the cluster - only yes, and no for the answer. Three guesses for cluster 2. List ten jobs for one cluster - change papers - then identify the cluster. 3. Variation - may be done by one student in front of class - list ten jobs on board.	SRA Handbook of Job Facts	

GRADE 6-8 SUBJECT AREA Physical Education

CONCEPT Career

SUBCONCEPT Investigation of careers in our city in recreation.

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
Students will be able to name jobs in our city dealing with recreation. Students will be able to list training, education, and two duties of each job.	Check with City Recreation Department for a list of jobs in our area dealing with recreation. Secure names and places of employment of these people. Let students interview these people and report to class on their findings concerning pay, education, training, and the possibilities of further training.	City Recreation Dept. Resource People	Interest in occupations in recreation area may be aroused.

GRADE 7 SUBJECT AREA Science

CONCEPT Career Education

SUBCONCEPT Laboratory related jobs.

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
The students will demonstrate, using essential laboratory procedures, and will identify many chemicals used.	The students will perform their own experiments under the direction and supervision of the teacher. The teacher will demonstrate correct laboratory procedures to the students. The students will practice the correct laboratory procedures. The students will become acquainted with scientific labeling of the bottles and chemicals used.	Life and the Moelcules (text). Laboratory Manual. Teacher. Other outside sources such as films and filmstrip.	The students will be able to use this knowledge in the many fields of science that involve chemistry. The students will have a basic background of knowledge for the further study of chemistry and chemistry related jobs.

GRADE 7 SUBJECT AREA Science

CONCEPT Career Education

SUBCONCEPT Laboratory related jobs that involve microscopes.

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
The students will become proficient in the operations of the microscope and microscope equipment. The students will learn to value the many uses of the microscope Through actual operation of the microscope equipment, the student will prepare slides of microscopic samples.	Practice in the actual operation of the microscope The preparation of slides by the students.	Life of the Molecules (text) Lab. Manuel Teacher Other outside sources Specimens from aquatic and terristrial communities.	The students will be able to use this knowledge for further study of microbiology. The knowledge and practice gained will be very useful to the student in a career of microbiology. The fields of study may range from the cure and prevention of many diseases, to the discovery of many new textiles or chemicals.

GRADE 7 SUBJECT AREA Science

CONCEPT Career Education

SUBCONCEPT The fields of education, medicine, and body health.

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
The students will identify and give the function of the parts of the human body and describe the care needed for maintaining good health.	Drill and discussion of the parts of the body. View many health films. Viewing many films showing the functions and systems of the body. The drawing of many of these parts, to help identify and locate the parts of the body being studied.	Text, films, teacher, filmstrips, charts and transparencies.	This will give the student a basic knowledge of the human body. The student will be able to pursue a job in the fields of medicine education, or body health (health studio's, etc.). This will also give the student a basic background for further education.

GRADE 8 SUBJECT AREA Science

CONCEPT Career

SUBCONCEPT Viewing jobs at Weather Bureau.

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
The student will list three jobs found at weather bureau and list three duties of each.	After completion of unit on weather arrange field trip to Weather Bureau.	Lake Charles Weather Bureau	Write a short paragraph about each job to put in Career Education folder.

GRADE 8 SUBJECT AREA Science

CONCEPT Career Education

SUBCONCEPT Jobs dealing in weather.

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
Students will show basic understanding of weather, instruments and forecasting by plotting and tracking storms as they move across the U. S. and by attempting to predict the weather.	Learn the names of the instruments used and their uses. The studying of weather maps obtained from the U. S. Weather Bureau. Plotting and tracking fronts and storms as they move across the United States. Trying to predict the next days weather according to the previous days weather. Taking a field trip to observe a weather station and how it operates.	Text, teacher, U.S. Weather Bureau, Resource people in weather, TV Station.	This should give the student a basic understanding of the weather. This will allow the students to pursue a field of study in weather.

GRADE 6-8 SUBJECT AREA Science, Health

CONCEPT Careers

SUBCONCEPT Jobs in a hospital.

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
Students will name ten jobs in a hospital. Students will name two duties of each above.	Let children make a list of all hospital jobs of which they are aware. Secure filmstrips or three interviews. Make bulletin board - show each area, combined with training necessary. Culminate study by field trip to hospital.	Interviews, Speakers from Hospital Field trip to Lake Charles Memorial Hospital Use library for information	Teacher observation of children working.

GRADE 6-8 SUBJECT AREA Exploration

CONCEPT Career implication of environmental living.

SUBCONCEPT Investiage jobs dealing with horticulture.

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
Students will list all local occupations related to horticulture.	Contact Mr. Hyatt at Horticulture Department to speak to class about jobs in horticulture. Children are to take notes on talk and do further research on the jobs Mr. Hyatt mentions.	Horticulture Department at McNeese Library Personal Interview	Oral discussion and rsearch will be conducted.

GRADE 6-8 SUBJECT AREA Exploration

CONCEPT Environment Living - Career Aspect

SUBCONCEPT Investigate local Wildlife Department jobs.

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
Students will list three jobs found in Louisiana Wildlife Department and will include three duties of each job.	Following unit on wildlife in our area arrange for speaker from Louisiana Wildlife Dept. to come and talk to class about jobs in wildlife department in our area.	Booklet -LSU Corpt. Services "Wildlife Pioneers" Speaker from Louisiana Wildlife Department	Wildlife careers in state of Louisiana will be delineated.

GRADE 6-8 SUBJECT AREA Shop

CONCEPT Career in Electricity

SUBCONCEPT Student will acquire five basic skills of electrician.

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
The students will wire a wall switch. The students will wire a ceiling light. The students will make splices and tape them. The students will replace a lamp socket. The students will have a working knowledge of breakers.	A demonstration of each activity will be done by instructor - then the students will conduct the activity.	Wire, tape, lamp sockets, wall switches, breaker box, pliers, screw driver.	Check work of each student.

GRADE 6-8 SUBJECT AREA Shop

CONCEPT Elementary plumbing with career implication

SUBCONCEPT Student will learn some of the basic skills of plumbing.

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
The student will measure and cut a length of pipe. The student will thread a pipe. The student will make up fittings. The student will take trap off sink and clean it. The student will take off faucet and change washer. The student will know the possible careers involved with plumbing.	Student will work under supervision of teacher.	Joint of pipe, tees, ells, thread cutting oil, old laboratory or sink traps, washer for faucet, pipe wrench, pipe vise, set of dies, pipe cutter.	

GRADE 6-8 SUBJECT AREA Shop

CONCEPT Woodworking with career implication.

SUBCONCEPT Student will learn eleven skills in woodworking.

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
The student will square a board. The student will saw a curved line. The student will use a wood rasp. The student will use a plane. The student will use a hand saw. The student will use a hand drill. The student will use a hand press. The student will use wood screws, nails to fasten wood. The student will sand wood. The student will stain wood. The student will varish wood.	Projects: Bird house, foot stool, gun rack, fishing rod rack, wall shelf, letter holder, top (toy), cutting board.	Assortment of woods various building sites will donate. Scrape material Plywood Wood screws Nails Stain Sandpaper Varnish Square Coping saw Rasps Planer Hand saw Hand drill and drill bits Brushes	Teacher observation of projects.

GRADE 6-8 SUBJECT AREA Shop

CONCEPT Manuel dexterities with career implications.

SUBCONCEPT Hand eye coordination with perception.

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
Student will trace design in leather. Student will carve design in leather. Student will stamp designs in leather. Student will lace leather projects. Student will apply leather finish.	Students will be given a choice of similiar projects. Teacher will demonstrate each step of procedures to small groups.	Leather kits lace, leather finish, tools: swine finish, mallet, stamping tools, lacing needles.	Observation of finished projects.

GRADE 6-8 SUBJECT AREA Shop

CONCEPT Elementary carpentry with career plan

SUBCONCEPT Development of manuel dexerity and visual perception.

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
The students will identify and use common carpentry tools (square, hammer, ruler, nail set, etc.) The students will cut a common rafter. The students will successfully use a hammer and nail. The students will measure and square wood.	Cut a mini-rafter, class will construct a dog house, complete with rafters, studs, etc.	Utility 2" & 4" Nails, hammer, framing square, rule, hand saw, nail set	Observation of students' work.

GRADE 6-8 SUBJECT AREA Shop

CONCEPT Career Education

SUBCONCEPT Hands-on-experience in planning and drawing projects (woodwork).

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
The student will draw plans of a specific project.	Resource speaker from building trades council. Class discussion following visit of resource person. Teacher-student planning and working on plans involving woodwork. Students work on woodwork projects.	Teacher, text, library, films, encyclopedias, resource person.	Students will summarize by doing a specific project.

GRADE 6-8 SUBJECT AREA Shop

CONCEPT Upholstery (Simple)

SUBCONCEPT Manuel dexterity, visual perception

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
Student will measure and cut upholstery material. Student will measure and cut padding of foam rubber. Student will use stapler gun to fasten material. Student will use upholstery tacks to fasten material. Student will learn to fold corners and use punchers in upholstery.	Student will have constructed a stool or rocker prior to this activity in carpentry. Now he will upholstery item under supervision of the teacher.	Upholstery material can be secured as scraps from local people, foam - also can get scraps, staples for gun, upholstery tacks, utility knife,staple gun, square, tack hammer.	Teacher will observe finished products.

GRADE 7-8 SUBJECT AREA Shop

CONCEPT Career Education

SUBCONCEPT Machine shop and welding contact experience.

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
The student will become familiar with local industry needs, and how they are met. The student will handle, for exploratory purposes, the metal lathe, the metal ore and acetylene torch.	A visit from machinist: Discussion on the variety of work done for local industry. Question and answer period. Samples of machine work, welding, and fabrication shown and discussed. Demonstration by teacher of: metal lathe metal ore acetylene torch	Resource person Lecture Films Teacher Text	Each student was required to do a project in one of the fields discussed and worked with in this area.

GRADE 7-8 SUBJECT AREA Shop

CONCEPT Career Education

SUBCONCEPT Electric circuits and apparatuses.

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
The students will work with and assemble electrical components into working circuits after studying plans and drawing a plan of their projected circuit.	A visit from (Mr. Wiley, or) an electrical contractor who will talk to the students. Discuss the various facets of electrical work What's required Many branches and divisions of electricity Employment Discussion Teacher-pupil (open)	Texts Resource persons Library Films and filmstrips Teacher	Students constructed simple circuits. Oral quiz and discussion to determine understanding (demonstration by students).

GRADE 8 SUBJECT AREA Shop

CONCEPT Career Education

SUBCONCEPT Hands-on-experience in bricklaying.

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
The students will study, draw or design a simple masonary plan, and execute the plan by mixing mortar* and laying bricks to shape up a portion of a wall and corner. *Mortar - use lime instead of cement. When lime mortar dries, it can lie crushed and re-used.	Visit by bricklaying contractor: lecture, demonstration on proper ways of laying bricks, including preparation of laying. Question and answer period. Pupils engage in hands-on-experience: layout, mixing motar, laying bricks. Students visit construction area where bricklaying is being done.	Resource person Teacher Lecture Films Library Field trip	Each student demonstrates his new ability by mixing motar and laying bricks for a corner and a wall.

GRADE 6-8 SUBJECT AREA Social Studies

CONCEPT Career Education

SUBCONCEPT Job varieties in the petroleum industry.

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
The students will analyze the jobs involved in the drilling and refining of oil.	Reading and discussion of pamphlets and booklets (ex. "Going Places in Oil" and "Energy and Economics Growth"). Use of a model drilling rig. Use of a model refining unit. Use of available films and filmstrips. Interviewing resource personnel in the oil industry.	American Petroleum Institute Library resources Teacher Individual students Resource personnel	Teacher's observation, demonstration, reports, class discussions.

GRADE 7 SUBJECT AREA Social Studies

CONCEPT Career Education

SUBCONCEPT History and geography in relationship to climate.

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
Each student will see that history and geography influenced the early development of the United States, how Americans have made use of their natural advantages, and how they have overcome some of the more unfavorable features.	The teacher will have the students list as many reasons why the south is basically farming area. Students will make known those jobs most common in the south. Question and answer period.	Teacher Students Library Maps	Class discussion, participation by each student on the type of education a person should secure if the planned to live in the south.

GRADE 7 SUBJECT AREA Social Studies

CONCEPT Career Education

SUBCONCEPT Weather in relationship to farming.

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
Each student will see that a farmer is concerned about the land and the weather. Every crop must grow on some land and even on the best of land, crops will not grow well unless the weather is right.	Teacher have students look up average amount of rainfall per week, month, year in the south. Student must learn crops and methods best suited to his soil. Students will discuss and look at the various weather and rainfall maps. Students can discuss things that affect what farmers raise: education, customs, soil, tools, distance to market.	Teacher Students Rainfall map Weather map	Class discussion, participation by each student, reports. History of rainfall. The report can trace the efforts of rain makers from the days of witch doctors to the present time with its scientific approach.

GRADE 7 SUBJECT AREA Social Studies

CONCEPT Career Education

SUBCONCEPT Transportation in relationship to work.

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
Each student will see that transportation is a vital part of our world of work.	Teacher have students list jobs related to transportation. Students make known those jobs that their parents have which are related to transportation. Class discussion on importance of transportation. Map study of major routes and etc. Relate local environment and transportation. Question and answer period.	Teacher Students Maps Library Encyclopedias Magazines Newspapers	Class discussion-participation by each student - presentation by each student on importance of transportation.

GRADE 8th SUBJECT AREA Social Studies

CONCEPT Career Education

SUBCONCEPT The jobs of the Registrar of Voters, Poll Commissioners and Special Deputies. The Use of Voting Machines

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
The students will analyze the jobs of the registrar of voters, poll commissioners, and special deputies. The students will know how to use a voting machine.	Show sample ballots from the parish custodian. Show sample applications for registration from the registrar of voters. Invite the parish custodian of voting machines to talk to the class and demonstrate a voting machine. Hold a mock election.	Registrar of voters Custodian of voting machines Individual students Teacher	Teacher's observation, student demonstrations, class discussions.

AIDS FOR CURRICULUM DEVELOPMENT
IN CAREER EDUCATION
GRADES 9-12

GRADE Special Ed. SUBJECT AREA Pre-Vocation

CONCEPT Hospital Work

SUBCONCEPT Careers

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
The students will discuss duties of orderly or nurses aide. The students will compute their salary. The importance of this type work will be known. The students will discuss grooming habits that are important in hospital work.	Field trip to a local hospital. View films on hospital work. Read page 35 of A Job Here for You? (Nurses Aide) Discuss page 25 - Getting a Job.	A Job Here for You Getting a Job A Job Ahead Film: "How to Keep a Job" and "Planning Your Career"	Is the student able to discuss various hospital duties? Does the student understand how important this work is to their community?

GRADE Advanced Special Ed. SUBJECT AREA Pre-Vocation

CONCEPT Duties of Grocery Store Employee

SUBCONCEPT ____________________

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
The student will describe the various positions offered in a supermarket. The students will describe the various duties of each position. The students will compute their salary per week when paid hourly. The students will practice making change.	Vist a large supermarket. See film on jobs in a supermarket. Read story from The Job Ahead. Haye classroom "store" where one is the clerk, another is a customer - practice giving change. Practice reading prices on goods (2/59¢). RWS sheet on making change.	Ditto sheets- RWS "Budgeting" Library books Films: "Arithmetic in the Food Store" "Your Food"	Check students ability to make change correctly in "class store". See if students are able to describe various jobs and duties in a supermarket. Written evaluation problems on hourly salary. (If you are paid $1.40/hr. how much do you make daily? weekly? monthly?)

GRADE Advanced Special Ed. SUBJECT AREA Pre-Vocation

CONCEPT Service station duties.

SUBCONCEPT ______________________

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
The student will describe various duties of service station workers. The student will read the gas pump gauge, and give correct change. The students will compute their salaries.	Visit a service station; A resource person - station manager will speak to the class; Films; Read booklet on jobs; Practice computing price of gasoline "If 34¢/gal., how much is 5 gallons, etc.	Film: "Finding Your Life's Work" "Service Station Work" Books: Jobs from A to Z Getting a Job Jobs in Your Future	Does the student know the duties of the service station attendant? Can the student give the correct change? Written Work: Computing problems with gas and oil. Also, if paid hourly, how much will you make a week? a month?

GRADE 9 SUBJECT AREA Algebra I

CONCEPT Formulas

SUBCONCEPT Algebraic representation

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
Students will apply formulas to solutions of everyday probelms to become skillful in the use of representative symbols.	The use of formulas in everyday problems and exercises as it may be used to represent qualtities. The use of formulas in the solution of various problems.	Texts Library Everyday experiences Industry Commerical Enterprises	Trips to plants, businesses, and other enterprises where formulas are a part of the work of those workers involved in those activities.

GRADE 9 SUBJECT AREA Algebra I

CONCEPT Career

SUBCONCEPT There are several occupations requiring the use of Algebra.

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
The students will list jobs in industry requiring albegra skills.	Take a field trip to visit various industries in the area. Write for information to different industries across the country. Do a research paper on the availability of job opportunities.	Math reference (Library) Encyclopedias Career Guidance Office Resource persons (Business men)	The students give oral reports on current findings of algebraic skills needed in a chosen career.

GRADE 10 SUBJECT AREA Biology

CONCEPT Career

SUBCONCEPT Exposure of students to people in the medical field may enlighten them to new ideas concerning occupation.

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
To explore the opportunities that are open to students in the field of medicine which do not require a college education.	Students will choose a hospital to visit where the staff has special personnel to speak to the students about opportunities in the field of medicine.	Field trip to a hospital where films are shown concerning careers in the field of medicine.	The students who feel that the medical field means 4-6 years of college are enlightened about other opportunities available which involve special training without college preparation. A class discussion following such a trip allows them to express their ideas and thoughts about this type of training after high school. Students who are not college bound will gain from this experience.

GRADE 10 SUBJECT AREA Biology

CONCEPT Career

SUBCONCEPT Science knowledge is vital for citizens who are interested in community welfare.

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
The students will consider the climate in Southwest Louisiana and the conditions which are present at this time. To collect data from people concerned with ecology in our area.	Certain students will be asked to contact individuals in various agencies concerning environmental control.	Mosquito control units Various chemical plants of our area City officials Wildlife management occicials.	Students will find that after collected data is studied science is interwoven with politics and community welfare. Several careers are open to students who are interested, not only in employment, but in community welfare.

GRADE 10 SUBJECT AREA Biology

CONCEPT Career

SUBCONCEPT Many fields are found interesting if the student can explore for himself.

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
The student will choose an area of botany, in which he may have an interest, and spend 4-6 weeks developing a project.	The library will be used as a material center for the information which the student will need to research. Gathering materials related to the project is suggested so that the student can actively apply his knowledge to something useful and worthwhile.	Libraries; Field trips to gather materials; Peer groups are also a source, since they too, are gathering materials in the same manner.	The student will discuss a genuine interest in the plant kingdom and at the same time find that a career dealing with plants can be a fulfilling occupation.

GRADE 9 SUBJECT AREA General Business

CONCEPT Careers

SUBCONCEPT Knowledge of business.

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
The students will formulate and present need for well trained workers, and develop an appreciation of the necessity for considering careers in which they can make their greatest contribution to personal, civic, social, and economic well-being.	The students will compile a scrapbook entitled "My Occupation" about which he/she will assemble newspapers, rates of pay at different companies, educational requirements, promotional opportunities, brief history, number of workers engaged in occupation, duties of occupation, working conditions, advantages and disadvantages of the occupation, etc.	Encyclopedias Dictionary of Occupational Titles Guidance Office Career File Interviewers Career Exploration Kit Occupational Exploration Kit Occupational Outlook Handbook	A sharing hour -- each student will briefly describe his/her occupation to the class.

GRADE 10-11-12 SUBJECT AREA Typewriting I

CONCEPT Careers

SUBCONCEPT Knowledge of business.

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
The students will formulate their choice of different offucpations.	Each student will research his chosen occupation and include these areas: Title of occupation; Brief history of occupation; Workers engaged in occupation; Qualifications; Preparation for occupation; Duties of occupation; Earnings; Conditions of work; Places offering employment; Advantages and disadvantages of occupation. Student will type report in acceptable manuscript form, and retype on master unit for duplication, and compile a job resource manual and distribute it to each member of the	Dictionary of Occupational Titles; Guidance Office Career File; Interviewers; Encyclopedias; Career Exploration Kit (SRA); Occupational Outlook Handbook.	After distribution of manuals, students will type a brief job description of one or more of the jobs described in the manual.

(continued)

GRADE 10-11-12 SUBJECT AREA Typewriting I

CONCEPT Careers

SUBCONCEPT Knowledge of business.

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
	typing classes.		

GRADE 10-11-12 SUBJECT AREA Typewriting I

CONCEPT Careers

SUBCONCEPT Knowledge of typewriting.

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
The students will formulate their choice of occupations.	Each student will type a theme on "How I Would Support Myself--Should I Suddenly Become an Orphan."		Evaluated are the basis of interest and sincerity written into the theme.

GRADE 12 SUBJECT AREA Office Practice

CONCEPT Careers

SUBCONCEPT The Interview

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
The student will define an interview as a mutual exchange of information, ideas, and impressions. The student will summarize relevant points in his business knowledge, experience, and educational qualifications, and will recognize pertinent facts about the business organization to which he is applying. Also, the student will identify employable qualities and should aniticipate "stock" questions the interviewer might ask. The student will apply the proper grooming rules and will participate in an interviewing procedure. The student will (continued)	Group Activities: Have a resource person (an interviewer from a local company) speak to the class on what he looks for in an interview and what influences him. Have students with interviewing experiences relate those experiences. Have the class dress appropriately for an interview. Have the group give skits on good and bad interviews, with class criticism, based on interviewer's work sheet. Divide the class into groups to have a contest involving the best display boards. Show films on the basic rules of interviewing. Have an employment agent (continued)	Equipment: filmstrip projector, overhead projector, film projector, tape recorder, video-tape set up, typewriters. Resources: Books: Effective Secretarial Practices; Employment Interviewing; The Evaluation Interview; Personnel Interviewing: Theory and Practice; Job Strategy. Phamphlets: "Pick Your Place in the Sun" ~~(continued)~~	Objective test, individual projects.

GRADE 12 SUBJECT AREA Office Practice

CONCEPT Careers

SUBCONCEPT The Interview (continued)

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
illustrate etiquette used in approach to receptionist, secretary, and interviewer, and should be aware of the necessity for being truthful in any verbal or written question. The student will list his necessary skills and compose a follow-up letter shortly after the interview.	resource person give a short talk on their procedures. Use hand out of "Questions that the Interviewer Might Ask" for class discussion. Prepare and show transparencies on follow-up letters. Use case study problems. Show and discuss interview transparencies. Individual activities: Video-tape each student with an interviewer and disucss. Tape-record an actual interview and discuss. Have student report on articles or books read. Conduct debate: A student from our high school upon graduation is seeking employment in (continued)	"Making the Most of Your Business Interview" Periodicals: "A New View on Interviews", Journal of Business Education; "Instant Replay New Techniques", Business Education Forum; "Corporation as a Source for Students" Business Education World. "Project in Job Seeks and Interviewing", The Balance Sheet Films: "Developing (continued)	

GRADE 12 SUBJECT AREA Office Practice

CONCEPT Careers

SUBCONCEPT The Interview (continued)

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
	a local bank as a stenographer. She types 60 wpm and takes dictation at 120 wpm. She has a friendly personality, dresses appropriately, and has good manners. An older woman of 55 is also hoping to get this job. She types 60 wpm and takes dictation at 110 wpm. She makes friends very easily. She dresses nicely and is well-poised. She does have work experience with a previous insurance company. She left her job because she was needed at home. Now she must return to work. The reason she can't return to her first job is because of transport- (continued)	Your Character" "Finding the Right Job" "How to be Well Groomed" Transparencies: "The Job Interview" Follow-up letter Guest speakers: A person from either state or private employment agency. A person from local corporation.	

GRADE 12 SUBJECT AREA Office Practice

CONCEPT Careers

SUBCONCEPT The Interview (continued)

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
	ation problems. Problem: If you were the employer, who would you hire? Defend one side with justification.		

GRADE 9-12 SUBJECT AREA Carpentry and Cabinetmaking

CONCEPT Bench woodworking

SUBCONCEPT Hand tools and their uses.

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
1. Students will be able to: (a) Layout and cut a hexagon. (b) Cut a rabbet joint. (c) Square stock to a given dimension (d) Cut a flat base with mitered corners. (e) Construct an end mitered base. (f) Cut and fit a cross lap joint (g) Cut, fit, and fasten pieces of wood to form a set of book ends. (h) Fasten prepared stock with wood screws. (i) Cut, fit, and fasten pieces of material to construct a speaker's stand. (continued)	1. An initial orientation to hand tools should be provided the class. 2. A demonstration should be provided for the class related to each objective prior to student's activities beginning. 3. Safety topics should be stressed concurrent with each objective.	See page 146 at the end of this section	1. Evaluate each student's skill development in terms of each product provided from each objective. 2. Evaluate safety in terms of attitudes and care demonstrated in daily activities. 3. Construct a paper and pencil test related to main points of each objective. 4. Construct a paper and pencil test to measure the retained knowledge concerning safety in

(continued)

GRADE 9-12 SUBJECT AREA Carpentry and Cabinetmaking

CONCEPT Bench woodworking

SUBCONCEPT Hand tools and their uses. (continued)

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
(j) Construct a completed book case.			the employment of tools.

GRADE 9-12 SUBJECT AREA Carpentry and Cabinetmaking

CONCEPT Construction

SUBCONCEPT Foundations

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
1. Students will be able to: (a) Establish and locate a building site on a lot. (b) Measure and establish batter boards in position on a building site. (c) Construct continuous footing forms on a building site. (d) Construct individual pier footing forms. (e) Construct concrete wall forms.	1. The class should be moved to a site wherein the terrain and space are conducive to: (a) Locating a proposed building (b) Cutting and setting batter boards. (c) Obtaining the measurements for: (1) continuous footing forms (2) pier footing forms (3) Wall forms 2. The class should construct in the shop a set of: (a) continuous footing forms (b) pier forms (c) wall forms	See page 146 at the end of this section	1. The constructed forms will be evaluated on workmanship in terms of skill development growth. 2. Location of the site will be evaluated with regard to the accuracy of placement. 3. Safety and work attitudes will be evaluated daily in terms of desirable behavior in relationship to the on-going activity.

GRADE 9-12 SUBJECT AREA Carpentry and Cabinetmaking

CONCEPT Construction materials.

SUBCONCEPT Reading prints, estimating, and planning.

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
1. Students will be able to: (a) Name five kinds of woodworking drawings. (b) Convert measurements from architectural drawings to actual size measurements. (c) Construct pattern drawings for four different patterns. (d) Ten estimated measurements from prints and drawings will be made by each student and recorded.	1. Lessons will be taught wherein five types of woodworking drawings are the theme. 2. Students will be given a print and asked to convert measures after demonstrations have been provided. 3. Four pattern drawings will be made in a demonstration lesson.	See page 146 at the end of this section.	1. The students will be evaluated individually with regard to the accuracy of (a) the name of five drawings (b) converted measurements (c) patterns constructed (d) estimated measurements.

GRADE 9-12 SUBJECT AREA Carpentry and Cabinetmaking

CONCEPT Construction materials

SUBCONCEPT Wood material terminology.

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
1. Students will be able to: (a) Name ten kinds of woods. (b) Name three properties of each wood named. (c) Name four classes of graded lumber. (d) Make up a purchase order for 100 board feet of lumber. (e) Name three features that distinguishes plywood from veneers. (f) Name three features that distinguishes hardboard and particle board.	1. The class is divided into groups of three. A task is assigned wherein each group is asked to name each sample that is presented to the group and list three properties of each. Demonstration and discussion of each sample is then made by instructor. 2. Using four grades of lumber, a lesson is taught concerning how each grade is classified 3. Purchase orders are the theme for a lesson on purchasing materials. Each student is asked to write a purchase order for a list of materials. 4. Using different woods for specific jobs is	See page 146 at the end of this section.	1. Paper and pencil test related to material identification. 2. Completion of a purchase order in terms of accuracy is a measure of growth.

(continued)

GRADE 9-12 SUBJECT AREA Carpentry and Cabinetmaking

CONCEPT Construction materials.

SUBCONCEPT Wood material terminology. (continued)

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
	a theme for several lessons. Demonstration and examples are stressed.		

GRADE 9-12 SUBJECT AREA Carpentry and Cabinetmaking

CONCEPT Hand tools for carpentry and cabinetmaking.

SUBCONCEPT Circular hand saw.

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
1. The students will be able to: (a) Name four types and sizes (b) Name three adjustments that can be made with each saw. (c) Name five different kinds of cuts that can be made with a circular hand saw.	1. Use four examples to indicate different types circular saws. 2. Each student will adjust the saw for different cuts. 3. Each of the following cuts should be demonstrated and the student should perform same. The cuts are:	See page 146 at the end of this section.	1. Cuts should be identified. 2. Students should be able to name four companies that make circular hand saws. 3. Evaluate the skill development in terms of the cuts made by each student.

GRADE 9-12 SUBJECT AREA Carpentry and Cabinetmaking

CONCEPT Hand tools used in construction.

SUBCONCEPT Portable electric power tools.

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
1. Students will be able to (a) Name four parts of electric power hand tools. (b) Two concepts of safety and maintenance will be written by each student for power hand tools.	1. A portable drill is taken apart. The components are labelled and the function of each is discussed. 2. Similarities between the portable drill and other electrical powered hand tools are discussed.	See page 146 at the end of this section.	Each student will be able to label a drawing of the portable drill.

GRADE 9-12 SUBJECT AREA Carpentry and Cabinetmaking

CONCEPT Hand tools

SUBCONCEPT Sabre saw, electric drill, power plane, router.

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
1. The students will be able to: a. Name and identify each power tool listed. b. Functions of each power tool can be written by each student.	1. Activities should involve the demonstration of each tool; purpose and use should be emphasized. 2. Each student should perform three activities with each tool.	See page 146 at the end of this section.	1. Make a diagram of each tool. Have the student name and label each diagram. 2. Make a pencil and paper test of the functions of each tool.

T & I - Carpentry & Cabinetmaking

Career Education Teaching Materials 5-17-73

Books:

1. Cabinetmaking & Millwork by: John L. Feirer
   Use:
   a. Reference for furniture and cabinet design
   b. Reference kinds of wood and wood properties
   c. Reference for planning and layout
   d. Reference for in-depth study of tools and machines
   e. Reference for furniture and cabinet construction materials and finishing
   f. Introduction to industrial production.

2. Carpentry in Residential Construction by Stanley Badzinski, Jr.
   Use: Valuable a reference for:
   a. Foundations
   b. Floor, wall and roof construction
   c. Interior, exterior trim and siding
   d. Roof and insulation procedures
   e. Interior wall materials

3. Practical Problems in Mathematics for Carpenters by: Jack A. Luy
   Use: Valuable for teaching related math
   a. Whole numbers, fractions, decimals and percentages
   b. Computing measurements (triangles, circles, etc.)

Filmstrips by title (McGraw-Hill):

1. Hardwood Processing (Books 1-B)
2. Woodfinishing Part I & II (Books 1-E)
3. Design in Wood (Books 1-A)
4. Hardwood Lumbering (Books 1-B)
5. Safety in The Shop (Books 1-D)

Filmstrips and cassette program (Safety - Cornet Films) to be used by title as study sequence dictates:

a. Think Safety - Introduction and General Shop Hazards
b. Handsaws, Chisels and Files
c. Grinders, Routers, Power Saws & Jointers
d. Drill Presses & Lathes

GRADE 11 SUBJECT AREA Chemistry

CONCEPT Career

SUBCONCEPT

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
What interests and abilities must I have for a career in chemistry or chemical engineering? Which courses should I take? What work offers the best opportunity for advancement?	Reports on: Discussion of parent or friend of parents with related career. Study of chart showing the functions in a typical chemical company. Discussion of college requirements for these particular fields. Filmstrips on Petroleum Refining Film on Atoms in Medicine Relating careers to study of Hydrocarbons.	Textbook "Modern Chemistry" Student reports Filmstrip Esso Standard Oil Co. Manufacturing Activity Chemist Association American Petroleum Institution "Chemistry and Petroleum" that goes with the filmstrip Film-- "Atoms in Medicine"	Summary: Teacher: Questions that need answers Summary: Students: Final statements, and questions that need more reference work. Did the student accurately describe the chemical industry? Did the student learn the requirements of candidates for employment ? Did the student become aware of the multitude of opportunities in the chemistry industry?

GRADE 9 SUBJECT AREA Civics

CONCEPT Certain national and state laws are regulating business and labor.

SUBCONCEPT These laws may affect the type of work one does and the conditions under which one works.

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
As a result of their participation in this unit's work, the students will know that the federal and state government make laws for the protection of laborers: a. laws protecting child laborers b. laws setting up minimum wages c. laws for safe working conditions in certain types of jobs d. laws for compensation of workers injured on the job e. laws for compulsory social insurance (Social Security) f. laws giving privileges to and laws restricting the activities of labor unions.	Have students read from textbook and from "Jobs in Your Future" the appropriate topics. Have students take down details on these laws in their civics notebooks. Discuss the need for each of these laws and how each law may affect us personally. Have a representative from the Social Security Office come to speak on social security.	Your Life as a Citizen Jobs in Your Future (Career Guidance Office) "Three Laws About Jobs" and "Your Social Security Number" pp.18-19	Test

GRADE 9 SUBJECT AREA Civics

CONCEPT Careers

SUBCONCEPT ____________

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
The student will describe and analyze the career which reflects his personal interests.	Each student will chose three vocational areas of interest. The student was to undertake a thorough study of one of the areas. A booklet was prepared which contained every aspect of the particular career known. The booklets were shown to the other students in various social studies classes and were displayed in the library. The booklets were also used by the principal at one of the school meetings. Note: The students were instructed to interview a person in the field of their interest to acquire a personal aspect to the booklet.	Encyclopedias Research in Career Guidance Office Library sources Interviewers	The students will give an oral report on the career of their choice. Booklets were exchanged and students were allowed to study the research booklets of their classmates.

GRADE 9 SUBJECT AREA Civics

CONCEPT Students should think seriously about their future occupational choices.

SUBCONCEPT One's interest and ability are important in making the right choice.

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
As a result of their participation in this unit's work, the students will: list two important reasons for making the right choice for their occupations; list two items expressing their own interest and ability; list two reasons why many jobs are open to varying interests and abilities.	Have students read and discuss chapter 23, "Taking Stock of Personal Traits". Have students take the Kuder Preference Test. Have students score and interpet results of test. Have students use the Occuscan and Student Record Book and the Occupational Exploration Kit. Have students do reports on several jobs.	Your Life as a Citizen Test materials from Guidance Office. Career Guidance Office	The students were graded on the basis of their reports.

GRADE 9 SUBJECT AREA Civics

CONCEPT Use appropriate methods in applying for a job. When one has a job, be a responsible worker.

SUBCONCEPT Make a good impression. Convince the employer that you want to work and have the ability to do the work required.

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
As a result of their participation in this unit's work, the students will know how to behave appropriately at a job interview and will know how to fill out a job application blank. The students will want to make a good impression on the job (whether they intend to keep it permanently or not).	Show film - "A Job for Ruth". Have students do the appropriate activities in Jobs in Your Future. Suggest that those students who do not have a social security card - apply for one. Have students fill out sample job application blanks. Have students write sample letters of application for a job. Have students do mock application (for a job) by telephone.	Career Guidance Office	Evaluate students attitudes in class discussion. Evaluate sample letters, application blanks and mock telephone conversations.

GRADE 9 SUBJECT AREA Civics

CONCEPT Career

SUBCONCEPT

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
The student is able to come in contact with a number of vocational objectives.	Kuder Preference to profile interest. Round table discussion of different careers. Chapters 23 and 24 of the text.	Library Film Speakers Field trips Kuder Preference Text book	The student will present a report to the class on any career he chooses. The student will have attached a notebook filled with a collection of clippings or articles pertaining to his career.

GRADE 9 SUBJECT AREA Civics

CONCEPT Careers

SUBCONCEPT Knowledge of a chosen career.

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
The student will research a career he has chosen or career interest he has indicated.	Research of career by students. Information to be placed on note cards and filed under large group headings, i.e. nature of occupation, personal requirements, present and future opportunities, and summation. If student indicated he has no particular interest in any particular occupation, administer career interest test. This could be done for all, if time permits, in order to reinforce previous choices of students. Arrange field trip to a particular business so students may receive first hand information on general requirements in applying for a job.	Career Guidance Office Library Encyclopedias Interviews Information obtained by writing to headquarters Unions Teacher's personal materials Guest Speaker	Student is to prepare and assemble material on specific career. This is turned in as culminating activity of career unit. All work is to be placed in a booklet for final analysis.

(continued)

GRADE 9 SUBJECT AREA Civics

CONCEPT Careers

SUBCONCEPT Knowledge of a chosen career.

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
	Information should be dispensed by teacher such as statistics, important dates in history of labor movement, state and federal laws pertaining to labor and other information.		

GRADE 9 SUBJECT AREA English

CONCEPT Careers

SUBCONCEPT (1) Gaining information and understanding about a wide variety of careers and occupations. (2) Making wise choices among a wide variety of careers.

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
The student will select a substantial number of potential careers and develop a record of information on each. To use this information and activities to find a true picture of one's interests and abilities in the various career fields.	Collect "Career Corner" articles from the local newspaper and pick out information considered to be most valuable or important to remember. Description Duties or responsibilities Laws of requirements Advantages and disadvantages Examine classified ads. Write letters of appreciation. Reports on jobs: Requirements Factors which affect jobs Rural and urban differences.	Films Filmstrips Cassette tapes Resource persons Library Fieldtrips Counselor's services Speaker - from variety of career areas. Take interest and aptitude tests (if available) and make profiles.	Check folder of career information Assignments-letter of application, resume', etc. Daily participation and response.

GRADE 10 SUBJECT AREA English

CONCEPT Vocational choices

SUBCONCEPT There are specific requirements for each vocational choice.

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
The student will list what vocational choice he actually wants to pursue based on certain requirements and availability of opportunities for employment. 1. Interest 2. Aptitude 3. Education level 4. Open positions 5. Job benefits 6. Compensation	Students are to check the local daily newspapers for advertisements of at least two jobs they feel that they would really like to acquire. After this, students will spend several periods in the library doing research on the job preference they are interested in to get descriptions, requirements, and opportunities for employment. The students having done the above, will then compile the information they have gathered and report to the class their findings. Following the reports of the students, films related to the reports will be shown. After some discussion of the reports and films,	Library references Resource people Films	A question and answer session will follow the reports and films. Resource persons will also answer questions from the students relevant to the various careers. The students will write a reply to help-wanted advertisements.

(continued)

GRADE 10 SUBJECT AREA English

CONCEPT Vocational choices

SUBCONCEPT There are specific requirements for each vocational choice. (continued)

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
	students will be given instructions on how to read between the lines of help-wanted ads, how to answer help-wanted ads and what information to withhold in answering ads. Then they will write a reply to the advertisement of their first job preference.		

GRADE 11 SUBJECT AREA English

CONCEPT English skills needed in the area of careers.

SUBCONCEPT It is important to know one's special aptitudes and how to prepare, seek and locate a job in which there will be personal satisfaction.

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
The student will list his special interests and abilities. The student will discover more about his particular interests. The student will name various sources where job opportunites may be found. The student will view the vocational education program.	The Kuder survey will be administered to each student after which the counselor or teacher will interpret the results to him. Through research from library materials and materials in guidance office the student will learn more about what his job interests will require. A report will be made and given orally to class. The student will study "Want Ad" sections in newspapers and periodicals. Speakers from both public and private employment office will be engaged. He will learn to interpret the abbreviations in "Want Ad" columns. He will write examples of	Kuder interest survey for each student. Periodicals, newspapers, encyclopedias, biographies, autobiographies and materials in career guidance office. Speaker. Filmstrip cassettes; text book, Voices, Literature, pp. 478-489. Copies of application blanks. Personnel managers and speakers from plants; office managers;	The student should began to seriously consider what he plans to do. The student will learn more about the requirements necessary - education, etc. that are necessary to prepare him for a position in his chosen field. English skills will be practiced in writing and giving reports. The student will learn that looking for a job is something to be proud of. He will learn procedures to use in locating a job.
	(continued)	(continued)	(continued)

GRADE 11 SUBJECT AREA English

CONCEPT English skills needed in the area of careers.

SUBCONCEPT It is important to know one's special aptitudes and how to prepare, seek and locate a job in which there will be personal satisfaction. (continued)

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
	"Position Wanted" ads. Discussion at intervals of filmstrips; use of English skills in writing letter of application, resumes, and filling out application forms. Role-playing activities demonstrating telephone manners in asking for an interview; role-playing activities demonstrating interviews, discussion of language and dress during interview. Discussion and role-playing activities demonstrating actions which should insure success while on the job. Study of payroll checks. Study of American economy.	Examples of payroll checks; Excellent ideas in Voices, Literature, Bk. 3, pp. 487-490.	English skills are practiced in writing ads. The student, using skills emphasized in English classes, will learn how to make application for a job. He will learn how he is expected to perform on the job. He will learn to read the various deductions listed on his paycheck. He will learn his function in the American economy. Using the basic skills of communication in writing and

(continued)

GRADE 11 SUBJECT AREA English

CONCEPT English skills need in the area of careers.

SUBCONCEPT It is important to know one's special aptitudes and how to prepare, seek and locate a job in which there will be personal satisfaction. (continued

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
			speaking as taught- the English classroom, the student developes interest and even enthusiasm for the world of work for which he is preparing in learning how to write correctly and effectively and how to speak effectively and correctly.

GRADE 11 SUBJECT AREA English III

CONCEPT To explore specific career of one's choice.

SUBCONCEPT To express plans for the future.

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
To encourage 11th grade students to start thinking positively about their chosen profession. To allow them to hear first hand about such professions as the ministry, college professor, secretary, plant worker, etc.	Introduce them to the unit by discussing future plans. Get ideas from these for speakers. Have different speakers who will discuss and answer questions about their profession. Have each student write a paper about his chosen profession.	Library Career Guidance Personal Friends	Evaluate and read to the class their papers on their profession.

GRADE 12 SUBJECT AREA English IV

CONCEPT To explore business functions in a specific community.

SUBCONCEPT To become aware of the world of work.

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
To acquaint students with various functions of community from government to business, education, and religions. (Oral Research Project)	Invite guest speakers from the community to share their experiences with the class in the form of brief talks followed by question and answer period.		Both students and speakers have expressed appreciation for a reciprocal point of view. Students have been made aware of the world of work through their vis a vis encounter.

GRADE 9-12 SUBJECT AREA Foreign Language

CONCEPT International occupations.

SUBCONCEPT Local careers utilizing foreign language.

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
List four occupations that require a knowledge of a foreign language. Have students list two of their interest areas and two of their abilities that relate to occupations requiring foreign language.	Have students write for information from sources listed on this page. Have students discuss ways a knowledge of foreign languages could enhance careers in ministry, teaching medicine, nursing, geology, resource engineering, architecture, social service, banking, export and import trade, entertainment, journalism, secretarial work, as well as foreign guide, etc.	Movie: "Why Study a Foreign Language "U.S. Foreign Service Careers" 188(0-94) "United Nations" PRU 71-1.2/A SRA Occupational Brief #143 F.L. and Your Career PO-1970 0-401-059	Have students report briefly on their careers they find most inviting and how, if possible, knowledge of foreign languages could enhance career. Have class prepare master list of all careers where knowledge of foreign languages would be an asset. This list might be in form of a picture poster illustrating various careers.

GRADE 9-12 SUBJECT AREA Foreign Language

CONCEPT Verbal and narrative communication

SUBCONCEPT Bilingual communication in occupations

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
The student will list five occupations that require bilingual communication. **The student will name three activities that require the use of bilingual communication for each of the five occupations listed.**	Introduce the concept by discussing ways that knowledge of a foreign language could enhance a career. Have the students write for information about bilingual communication in occupations from the sources listed. Divide the students into four groups. Have each group prepare a bulletin board or a scrap book on occupations that require two or more languages. Permit the students to role play or write and perform a skit wherein bilingual communication is used in an occupation.	Foreign Language Courses Dr. Theodore Huebener, Universal Publishing and Distributing Corp., 800 Second Ave., N.Y., N.Y.; "Export Trade" Weekly trade magazine; "Lovejoys Career and Vocational School Guide"; Institute of International Education, 809 UN Plaza, N.Y., N.Y. 10017 Movie-"Why Study a Foreign Language"; (continued)	Establish a subjective or objective instrument based on the two objectives. Evaluate the bulletin board, scrap book, and/or skit in terms of effort expenditures rather than degree of excellence demonstrated.

GRADE 9-12 SUBJECT AREA Foreign Language

CONCEPT Verbal and narrative communication

SUBCONCEPT Bilingual communication in occupations (continued)

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
		"U.S. Foreign Service Careers" 188(0-94); "United Nations" PRU 71-1.2/A; SRA Occupations Brief-#143; "Foreign Language and Your Career" GPO-1970 0-4d-059.	

GRADE 12 SUBJECT AREA Home Economics IV

CONCEPT Clothing construction

SUBCONCEPT Tailored garment.

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
The student will select a woman's tailored jacket pattern in her size. Selection of materials for a selected woman's tailored jacket pattern will be made by the students. Coordination of selected materials will be made by the student resulting in a completed tailored jacket. The teacher will name areas of employment that are enhanced by the objectives. Ex: fabric selection and notions; alteration department of a commerical sales outlet; self-employment in clothing construction.	Supplies needed for tailoring Display and examine tailoring equipment Making pressing equipment Using pressing equipment Pattern selection Characteristics of a tailored garment Line and design Pattern selection Fabric selection Color and design for tailoring Suitable fabrics Interfacing Buying fabrics Buying lining fabrics Selecting notions Tailoring techniques New vocabulary Fabric preparation Pattern alteration Pattern placement on fabric, cutting and marking (continued)	Curriculum Guide for Home Economics in La.: Bulle. #1150 Occupational Training in Home Economics Bulletin #1173 Clothing Construction Slides, Robert J. Brady Co., Prentice-Hall, Inc., 130 Que Street Washington, D.C. 20002 See and Sew Series; Butterick Fashion Marketing Co., P.O. Box 1914, Atoona, PA 16603.	At the end of the unit the student should be able to select fabric and sewing notions and be able to construct a simple jacket or coat for herself or another individual who has no major fitting problems. The completed garment should have more quality construction details than a ready made garment of the same value. The padding stitch in the lapel, lining the garment, and making bound button holes are

(continued)

GRADE 12 SUBJECT AREA Home Economics IV

CONCEPT Clothing construction

SUBCONCEPT Tailored garment (continued)

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
	Fitting Principles of unit construction Tailoring techniques for making a jacket.		the new skills learned.

GRADE 9-12 SUBJECT AREA Language Arts

CONCEPT Self appraisal

SUBCONCEPT Techniques for self appraisal

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
To lead students to appraise themselves of their occupational interests. To introduce students to various commonly used tests for determining job success. Insure student awareness of counseling services available through the school, state, and other agencies. To introduce student to letters of application, resumes, and follow-up letters of application. To allow each student to research his chosen vocation. To familiarize students with classified advertisements and how to answer them. To write business letters	Use OEK (Occupational Exploration Kit) to determine students' occupational exploration in relation to their educational plans, their verbal abilities, mathematical skills and their own special interests. Administer (if available) phychological tests or aptitude tests which are commonly used by personnel guidance counselors. Use the guidance counselor as a resource person to make students aware of the information, the experts, and the facilities available to them for guidance. Use various newspapers for advertisements for occupations. (1) Students	(See Appendix A) 1. OEK - Occupational Exploration Kit 2. Guidance Counselor 3. Filmstrips-Interviewing Techniques 4. Vocational Biographies	Students will receive grades for the following projects: 1. Newpaper ads prepared by the students. 2. Letters of application and resume. 3. Research papers. 4. Vocabulary lists. 5. Report of interview with worker in students' chosen fields. 6. Test covering all aspects of the unit. Teacher evaluates the unit by use of questionnaire
(continued)	(continued)		(continued)

GRADE 9-12 SUBJECT AREA Language Arts

CONCEPT Self appraisal

SUBCONCEPT Techniques of self appraisal. (continued)

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
for various purposes. To introduce student to interviewing techniques.	study ads for advertisement writing techniques. (2) Students write letters of application and resumes in response to a newspaper advertisement. Students prepare follow-up letters to the letters of application, above. Students prepare library research paper on their chosen vocation, writing a paper according to an outline which they will furnish. Students will compile a vocabulary list of words pertaining to their chosen vocation. Students group for practice interviews, using check lists to insure learning of interview techniques. (continued)		getting students' reactions to the unit.

GRADE 9-12 SUBJECT AREA Language Arts

CONCEPT Self appraisal

SUBCONCEPT Techniques of self appraisal. (continued)

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
	Students interview a person presently employed in the students' chosen field and report the results of this interview.		

GRADE 9-12 SUBJECT AREA Language Arts

CONCEPT Know youself

SUBCONCEPT To provide learning experiences designed to show how various characteristics are related to job success.

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
The student will list a combination of abilities the intelligent selection of a vocation requires. a. concrete-performance skills b. abstract-academic c. social To help the student understand the scope of his abilities and achievements a. Explain purpose of cumulative records b. Explain what grades may tell about the student c. Guide students in appraising their own achievement scores. To help the student evaluate and improve study habits. To help the student realize that success or failure in the world to- (continued)	Explore student's ability in terms of what he can do well. Administer a standardized achievement test or use recent scores if they are available. Select areas in which greatest strengths may be. Have student complete "Looking at My Grades." (attached) Complete "Achievement Record" expressing scores in percentile. (attached) Have students read booklet *School Subjects, and Jobs* in school subjects and certain jobs. Have student complete "Analyzing My Study Habits" (attached) Develop good study habits through: (continued)		

GRADE 9-12 SUBJECT AREA Language Arts

CONCEPT Know yourself

SUBCONCEPT To provide learning experiences designed to show how various characteristics are related to job success. (continued)

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
day depends on how effectively he uses his communication skills. To explore the relationship of good grooming to prospective employers. To focus attention on the importance of one's personal appearance and appropriate dress for different occasions. To realize that the knowledge and the practice of good grooming and good manners are essential to a desirable personality. To become aware that the real test of personality depends on how others see you and what they think of you.	1. Supervised oral and written reports. 2. Acceptance of correct and approved patterns for reporting, writing, speaking, listening, and reading. Have employers define expectations relating to manner, dress, work habits, attitudes, etc. Have students read reference material and answer questions on such areas as: 1. Courtsey 2. Etiquette 3. Personal appearance 4. Clothes 5. Grooming 6. Cleanliness 7. Social communication.		

CHECK LIST - LOOKING AT MY GRADES

The purpose of this check list is to help you think about: What your grades tell you about yourself. How much of your true efforts your grades show. What your grades show your strengths to be.

1. The higest grades I received last year were in ________________

____

2. What do these grades tell you about how hard you tried in these classes?____

3. In what subject did you work the hardest?______________________

____

4. What do your grades tell you about your ability to memorize things?____

____

5. How did your grades measure your study habits?_________________

____

6. How did your reading skill affect your grades?_________________

____

7. In which subjects do you usually get the higest grades?________

____

8. In which subjects do you get the lowest grades?________________

____

9. In which subjects do you have the highest interest?____________

____

ACHIEVEMENT RECORD

Achievement Test Record
Name of Test (s)

	Percentile Scores			
Subjects Tested	9th	10th	11th	12th
Reading				
Mathematics				
Science				
English- Language- Spelling				
Social Studies				
Study Skills				
Listening				
Writing				

Other Abilities Not Measured by Test Scores

	Lower 25th %ile	Middle 50th %ile	Upper 25th %ile
To do technical school work			
To learn to use tools & machines			
To get along with people			
To describe or explain in writing			
To appear before audiences			
To participate in physical activities			
To depict, design, or draw			
To organize and plan			

Directions: Think of your achievement test scores and see how many of these you can answer.

1. My greatest improvement has been in ____________________

____

2. My lowest performance has been in ____________________

____

3. My highest performance has been in ____________________

because ____

4. The subjects I think I can improve in are ________________

____

This is because ____

____

ANALYZING MY STUDY HABITS

Study Habits	Yes	Sometimes	No
1. Do I know the assignment exactly?			
2. Do I keep an assignment notebook?			
3. Do I have definite hours set aside for study?			
4. Do I have a definite place at home set aside for study?			
5. Do I have trouble getting started?			
6. Do I make notes of the important points in the assigned material as I study?			
7. Do I review my lessons briefly before going to class?			
8. Do I complete assignments on time?			
9. Do I collect the necessary materials before I begin to study?			
10. Do I waste time?			
11. Do I find myself daydreaming while I work?			
12. Do I check over major topical headlines before reading the material that follows?			
13. Do I recall main points as I study?			
14. Do I have confidence in my ability to master the subject matter?			

How may I improve my study habits? ______________________________

____

____

____

GRADE 9-12 SUBJECT AREA Language Arts

CONCEPT Know Yourself

SUBCONCEPT Hobbies may lead to a vocation.

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
To create an awareness in students of the many aptitudes possessed by each individual. To understand the value of hobbies and how they lead to a vocation.	Discuss with students the meanings of each of these areas and how each aptitude relates to the world of work. Aptitudes: a. General learning aptitude b. Verbal c. Numerical d. Spatial e. Form perception f. Clerical perception g. Motor coordination h. Finger dexterity i. Manual dexterity. Have students recall activities they used to enjoy but no longer are interested in and activities they have recently become interested in.		

GRADE 9-12 SUBJECT AREA Language Arts

CONCEPT Know yourself

SUBCONCEPT To aid each student in discovering and developing his interest skills, personality, and value system.

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
The student will analyze his vocational choice and the possible careers which he might pursue in terms of his interests, abilities, and chances for success.	Let students list occupations which might relate to each of these types of interest. Discuss their lists in class. Interests: A. Outdoor B. Mechanical C. Computational D. Scientific E. Persuasive F. Artistic G. Literary H. Musical I. Social Service J. Clerical (Interests are not aptitudes but are indicators of satisfaction.) Administer the Kuder General Interest Survey. This interest inventory may be administered by the classroom teacher.	Tests: Kuder-General Interest Survey, Science Re-Search Associates General Aptitude Test Battery, U.S.Dept. of Labor	Personal observation of student participation in activities. Interpret the individual test results with the student's self-appraisal chart. How well does the student understand his own aptitudes?

(continued)

GRADE 9-12 SUBJECT AREA Language Arts

CONCEPT Know yourself

SUBCONCEPT To aid each student in discovering and developing his interest skills, personality, and value system. (continued)

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
	If a teacher has not had training in interpretation of this survey, he should ask for help from the guidance counselor. Individual profile should be completed and each student made aware of the implications therein.		

GRADE 9 SUBJECT AREA Mathematics (General)

CONCEPT Banking

SUBCONCEPT Finding interest.

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
Through preparation of a budget the student will acquire knowledge of interest rates and how it affects his life.	Finding out how much of our budget is paid out for interest on loans and carrying charges. Finding out the advantages of interest in saving accounts, etc.	Text books Library Personal experiences Banks and loan institutions.	Actual costs of articles bought "on time" is figured with interest added to monthly payments. Trip to local loan institution to see how matters involving interest are handled.

GRADE 9 SUBJECT AREA General Math

CONCEPT Math in sports.

SUBCONCEPT Sports tabulations are pertinent to the wide world of sports.

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
The students will study how averages and rankings are obtained for professional sportsmen.	The students will study charts, diagrams, and explanations of findings of the averages for baseball professionals in the National and American league, as well as basketball and football.	"The Math Teacher's Journal" Library resources Discussion groups News Media	The students will complete a chart of a current team's average and compare it with the average of another team. Suggestions: Baseball: The Astros The Orioles The Raiders Basketball: The Knickers The Celtics The Lakers Football: The Dallas Cowboys The Redskins The Chiefs

GRADE 9 SUBJECT AREA Math

CONCEPT Career

SUBCONCEPT What is the value of this particular subject to the student's future vocation? How can you relate your subject to careers?

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
The student will list several areas in which a carpenter will use mathematics in the performance of his job.	It will be arranged for students to take a field trip to see a carpenter in the process of using his skills to help build a house. The carpenter then can proceed to show the impossibility of construction without mathematics.	Carpenter Home being built	Mathematics used in the total construction of a home will be listed. All mathematical formulas that may be used will be listed and theoretical application will be tried.

GRADE 9 SUBJECT AREA Math

CONCEPT Careers

SUBCONCEPT Knowledge of chosen career.

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
The student will formulate the practical applications of his/her study of math. All too often students fail to see how their studies have any bearing upon their future lives. They tend to think of school as an ordeal to which they must submit.	The students should make a booklet illustrating some of the activities involved in each occupation. They should use an attention getting photograph, several explanatory paragraphs, and an actual problem that occurs in the every-day work of these occupations. Then an answer section should be included with the solution to each problem.	Library references Resource people Counselor's services	Let each student give a report on one of the career choices.

GRADE 9-12 SUBJECT AREA Math

CONCEPT Career

SUBCONCEPT There is a great need and demand for high school training of banking procedure and computation for work or home.

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
Student will compute totally and completely several bank statements and bank procedures. The student will use and determine the balance in terms of outstanding checks and deposits.	Have the students bring to class one month bank statements, old checks, old saving account books, and deposit slips. This material could be drawn up by each student. A field trip to a local bank is suggested.	Overhead projector Transparencies Blank statement sheets, checks and deposit slips Pencils.	Teacher will make test. Have the students demonstrate the complete process of depositing, writing of checks and evaluation of statements from the time of deposit through the bank and then the return statement.

GRADE 9-12 SUBJECT AREA Mechanical Drawing

CONCEPT Introduction to mechanical drawing.

SUBCONCEPT Orientation to drafting.

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
The student will: (a) Name five fields wherein drafting is used. (b) Identify by labeling drawings of: (1) T-Square (2) Triangle (3) Parallel T-Square (4) Parallel Triangle	Lecture and discussion of drawing related to fields of drafting. Discussion of the "language of drawing." Demonstration and introduction of: (a) T-Square and Triangle (b) Parallel T-Square and Triangles (c) Drafting machine.		Construction of a paper and pencil test in order to: (a) identify and name the T-square, triangle, parallel T-Square, and parallel triangle (b) list terms used in drawing.

GRADE 9-12 SUBJECT AREA Mechanical Drawing

CONCEPT Introduction to mechanical drawing.

SUBCONCEPT Technical illustrations and machine drawings.

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
The students will do the following: Name four types of machine drawings; Draw and formulate four technical views.	Lecture and demonstrate drawing formations related to: alphabet of lines; single line view; orthographic view; dimensioning drawings. Discuss and demonstrate the following views through the use of formerly drawn examples: isometrics; obliques; auxiliary; perspective.		Structure an ongoing feedback system designed to measure the task assignment related to each objective. Each teacher should design his own feedback system to meet the needs of his students.

GRADE 9-12 SUBJECT AREA Mechanical Drawing

CONCEPT Lettering in drafting.

SUBCONCEPT Importance in lettering.

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
The student will do the following: Write a report listing three reasons for lettering drawings; Name four types of lettering; List the names of three instruments used in lettering.	Lecture on purpose of lettering drawings. Demonstrate with drawings the different lettering types including: (a) upper case; (b) lower case; (c) vertical; and (d) inclined. Have the students label a drawing using each type of lettering and the appropriate instruments.		Evaluate the ability to identify types of lettering. Evaluate the lettering that is produced by each student.

GRADE 9-12 SUBJECT AREA Music

CONCEPT Careers

SUBCONCEPT Geographical settings affect work.

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
The student will evaluate his career choice as it is affected by geographical factors.	The student will analyze the economic situations in music careers in his geographic area in comparision to this situation in other geographic areas and geographically illustrate the effect of these situations on his career interest area (e.g., orchestral musicians in large city areas, music teaching in economically deprived areas, etc.)		

GRADE 9-12 SUBJECT AREA Music

CONCEPT Career

SUBCONCEPT Career choice is a developmental process.

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
The student will list educational and training programs in terms of his needs, interests, abilities, and values that will assist him in converting vocational preference into reality.	The student will chart the musical academic offering of two colleges and two music schools. He will then, in terms of his needs, abilities and values determine the real vocational training available to assist him.		

GRADE 12 SUBJECT AREA Office Practice

CONCEPT Careers

SUBCONCEPT Job Application

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
The student will list the personal qualifications, knowledge, and skills necessary for employment. The student will analyze the job market for an area. The student will analyze his personal qualifications and select job positions for which he is qualified. The student will prepare the necessary pre-job interview papers. The student will acquire the necessary knowledge for securing, refusing, and leaving an office position.	Display poster No. 13 from the series "Getting a Job." Introduce the unit with the "Job-Getting Ability" set of transparencies. Have students analyze the job market by completing a list of the job sources in the community. a. School placement service or guidance counselor b. Newspaper want ads c. La. Employment Service d. Private employment bureaus, e. Dealer agencies--office machines office, etc. Display poster Nos. 1, 2, and 6 from the series "Getting a Job." Show transparency No. 2 from the series "Career	Books: YOU AND YOUR JOB, HOW TO FIND AND APPLY FOR A JOB, BUSINESS BEHAVIOR. Transparencies: "Career Planning" No. 2 "Job Application and Job Interview" Series III "Employ-Ability" and "Job Getting Ability" Poster-"Getting a Job" Sample forms may be used to make transparencies or may be duplicated to hand out to students.	Data sheet, letter of application, application form, objective test.

~~(continued)~~ ~~(continued)~~

GRADE 12 SUBJECT AREA Office Practice

CONCEPT Careers

SUBCONCEPT Job Application (continued)

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
	Planning." Have students select a job from a list of jobs available in the community. List the chances for advancement, list the educational requirements, determine suitability to this job by using self-evaluation chart. Display posters 3, 4, 7, 8, and 9 from the series "Getting a Job." Show the series III "Job Application and Job Interview" set of transparencies. Have student make the necessary pre-job interview preparations. Obtain facts about the company where you will be applying for a job. List the dress rules for	Guidance Counselor-- The guidance counselor usually has books tapes, filmstrips, and pamphlets from which the students may get information about specific occupations. Ex. "Choosing a Profession", series from Teaching Aids, Inc. - twenty-four tapes.	

(continued)

GRADE 12 SUBJECT AREA Office Practice

CONCEPT Careers

SUBCONCEPT Job Application (continued)

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
	the company. Draw a chart showing the company organization. List the names of the officials or officers. List the jobs available in the company. List the products produced or services rendered. Write a letter which you might mail to the people you are listing as reference. Prepare a data sheet. Write a letter of application. Prepare a portfolio if applicable to the job you select. Display posters Nos. 11, 12, 14, 15, 16, 17, and 18 from the series "Getting a Job." Show the "Employ-Ability"		

(continued)

GRADE 12 SUBJECT AREA Office Practice

CONCEPT Careers

SUBCONCEPT Job Application (continued)

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
	transparencies. Complete a job application form. The students should use the following tips when completing the form: Type or write neatly and legibly. Fill out every question asked. If the questions do not apply to you, draw a line after it to show you have read it. Don't overstate or understate the facts. Tell the truth. Be specific. Fill each blank out quickly yet carefully. If you have had no experience whatever, fill in this section with "In School." Have names of references (continued		

GRADE 12 SUBJECT AREA Office Practice

CONCEPT Careers

SUBCONCEPT Job Application (continued)

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
	ready with complete addresses and telephone numbers. Spell correctly and use good grammer. Read and checks blanks carefully. Review application blank to be sure that you have followed directions exactly. Use case studies.		

GRADE 12 SUBJECT AREA Physics

CONCEPT Career

SUBCONCEPT There is a specific knowledge essential for each career area.

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
The students will select a variety of careers for which physics is a prerequisite. These choices will be grouped into three catagories by requirements: Vocational - technical courses Some college - level courses College degree	Arrange for a field trip to Sowela Tech and McNeese engineering department. Qualified personnel can advise them as to which areas of physics are more important to specific fields and what training is required. Guest speakers (electricians, engineers, architects, etc.) can talk to the students about their specific fields and answer any questions.	Field trip Guest speakers	The students will categorize the specific areas they have studied and the training required. Each will pick a first and second preference and give their reason for choosing it to the class.

GRADE 9 SUBJECT AREA Science

CONCEPT Related Careers

SUBCONCEPT Careers

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
Have students suggest related careers. Mechanical Engineer Space Flight (vehicles) Compressors Industrial Magnets Optician Astrologer Insulation Highway and rail construction Calorimetry Thermodynamics Oil Refinery Electrician Electronics Microelectronics Television Radio broadcasting	Investigation-steam engineer, interval combustion engines, rocket engines, jet engines Report - posters Experiment - has compression Experiment - electromagnets See auto scrap yard where large electromagnets are used Experiment-Pholoelectric effect Investigation-Radio telescropes Experiment-Image formation by lenses. Visit opticians office. Investigation - Effect of different insulation materials. Experiment-Coefficient of linear expansion Food-diet claorie investigation and use of	Auto Shop-School NASA (Odor material) Speakers (local) Local Eye clinic House building sites (ways for insulating) Highway Dept. Cities Service Power plant as Gulf States Television Repairman Electronics Dept School T and I, Dallas	General: For each unit (or perhaps each chapter) have students keep notebooks on careers of their choice. Teacher could provide large indexed notebooks and each student's research material could be made available to all students. Notebooks could be checked periodically-to determine each student's contribution to the project. Individual visits to places of occupational interest could be

(continued) (continued)

GRADE 9 SUBJECT AREA Science

CONCEPT Related Careers

SUBCONCEPT Careers (continued)

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
	calorimeter. Experiments-conduction, conviction, and radiation Exp.-Fractional Distillation Exp. - Electrolysis Exp.-Generating electricity -Investigation Exp.-wet, storage cells Exp.-Type of circuits Investigation-transformers vacuum tubes transistors, deodes, triodes, etc. Trip to local plant Speaker from local facilities		reported on (orally and/or in written form.) Note the growth of awareness to vocational possibilities - allow students to relate incidents that show relation between basic science principles and jobs.

GRADE 9 SUBJECT AREA Science

CONCEPT Careers

SUBCONCEPT ______

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
Suggested by students vocations related to Space Program: Astronomer Geologist Meteorologist Oceanographer Marine Biologist Oil Exploration in Gulf	Investigate hydraulic brakes. NASA-field trips (or have students share experiences with class--if they have seen space program lab, etc.) Speaker from local Astronomy Club. Plan to see TV programs - or bring in news reports. McNeese Speakers. Seismograph Exploration (Local crew member might demonstrate.) Weather Station visit. TV programs -report on findings of people like Cousteau. Material could be ordered from oil companies. (Reports) Speaker - Oil Worker Desalting Plants - Report	NASA Houston McNeese Seismograph Co. Weather Bureau National Geo. Magazine Oil Exploration Companies	Notebook checks Keep weather news-make predictions accordingly.

GRADE 9 SUBJECT AREA Science

CONCEPT Careers in Science

SUBCONCEPT There is a specific knowledge essential for each career area.

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
The student will name various science related careers and list the training requirements of each.	At the beginning of the school year various science related careers will be discussed to develop an interest in Science. As each unit is introduced - 5 or 6 students will select a career related to the unit and prepare a written and oral report: Education and training required Opportunities for advancement What the work included, etc. May use guest speaker.	Guest speaker Available films Resource material Interviews with persons working in science Related jobs.	At the end of the year each student in the class should have had an opportunity to prepare a report. Given a variety of the careers discussed, students will arrange the jobs in order of the amount of training required.

GRADE 9 SUBJECT AREA Science

CONCEPT Related careers

SUBCONCEPT

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
The student will list and study possible careers (should be suggested by students.) Metric System (mfg. of balances, wts., other measuring devices) Research (any Science field) Fireman (Fire dept. - prevention - safety) Pyrotechnics Chemist Water purefication and related jobs as environmental control Photography Nuclear Physicists - (Power plants) Medicine Agriculture Archaeology-Anthropology Environmental Control Machinist Hydraulics (continued)	Investigations and experiences in lab-showing ease in using metric rather than English. Teacher sets up experimental situations - have students work out steps in scientific method-as hypothesis, etc. Advanced students carry out research projects. Experiment-extinguishing fires - study of extinguishers. Experiments-chemical nature of burning chemical reactions as oxidation, making salts burning organic compounds. Investigation - Radiation Experiments-Tracers in plants use of Geiger Counter-Gulf States - Nuclear Power Plant (continued)	Current magazines on changeover, texts Local Fire Dept. Local Water Dept Am. Petroleum Local Industry Nuclear Science Dept. at LSU Gulf States Utilities Local Hospitals County Agents Health Dept. Physics Dept.- MSU Agriculatural Dept. - MSU Machine Shops Weather Bureau Air Condition Mfgs. Order materials available from air condition- (continued)	Check write-ups on research done. (Make sure students learn proper way of reporting on research.) Good reports - should be made available to all interested students - perhaps in "open-end" notebooks. Additional information could be added as new reports are made or new information becomes available. Marks could be awarded according to contributions submitted.

GRADE 9 SUBJECT AREA Science

CONCEPT Related careers

SUBCONCEPT

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
Deepsea Diver Construction (Dams) Meterology Pneumatic Applicances Boat Designer Tire Manufacturer Air Conditioning	Investigation-Radioactive cocktails Carbon Daling-Investigation research on fallout. Report on skills needed. Investigation-water pressure Research on Bathyscphe, etc. Building Dams Experiments and investigations on relative humidity. Air humidifying-dehumidifying-Investigation Experiment-Archimedes Principle Experiment-Bernoulle's Principle Investigate Service Station lifts, etc.	ing companies.	

GRADE 9-12 SUBJECT AREA Social Studies

CONCEPT

SUBCONCEPT To develop attitudes of respect for cooperation with employers and employees.

BEHAVIORAL OBJECTIVE	SUGGESTED ACTIVITIES	SOURCES	REMARKS
Each student will list the most common reasons why employees fail.	Have principal or other school personnel discuss with students the information about students requested by prospective employers. Have local employers discuss with the students the most common reason for failure of their employees. Have the students learn the reasons an employee might fail. (Tapes could be made to play back to class). Employers should be interviewed only once - make individual assignments.	Employers from a business place School personnel Filmstrips	

APPENDIX B

PRESS RELEASE

Issued by

Dr. Paul J. Moses

February 16, 1972

COMPREHENSIVE CAREER EDUCATION MODEL

POSE: To establish demonstration, testing and development sites in Calcasieu Parish Schools.

ECTIVES: (1) Develop and implement a pilot program of career guidance and counseling at the elementary school level which will be designed to increase the career awareness of students in terms of the broad range of options open to them in the world of work.

(2) Improve the guidance and counseling services at the junior high level with particular emphasis being given to career exploration in the junior high schools.

(3) Improve guidance and counseling services at the senior high school level and establish a placement service to insure the placement of all exiting students in either a job, a post-secondary occupational or a baccalaureate program.

In essence the project is intended to provide occupational familiarization to the students from the elementary school level through the secondary school level in order that they may be made more aware of the many choices available to them in the world of work.

The pilot project will be 18 months in duration and will involve five schools: Barbe Elementary, Reynaud Junior High, LaGrange Junior High, Welsh Junior High, and Barbe Senior High.

A competent administrator .... (is to be or has been) employed to head up the project. He will immediately address his energies toward establishing a placement office for exiting secondary students in Calcasieu Parish to provide these students with information regarding employment opportunities available on a full or part-time basis.

Commencing with the summer of 1972 and continuing through the 1972-73 school year, six fellowships for graduate study will be granted through McNeese State University. These graduate fellows will be working in the previously named schools as counselors. Their efforts will be directed toward disseminating career information to the students and to assist teachers in the selection and use of materials about the world of work for use in the instructional program.

A follow-up study will be conducted to determine the effectiveness of the project.

WED, FEB. 16, 1972, Lake Charles American Press

Education plan ready

A unique cooperative effort to coordinate vocational education at all levels in Calcasieu Parish and Southwest Louisiana was jointly announced today (Feb. 16) by Dr. Thomas S. Leary, president of McNeese State University; Dr. Paul Moses, superintendent of Calcasieu Parish Schools, and P. O. White, acting director of Sowela Training Institute.

The program, the first of its kind in the state, is a comprehensive plan for an educational program ranging from the elementary through college graduate level.

"It is an effort to make vocational education more meaningful and practical to Southwest Louisiana citizens," Dr. Leary said, "and has been over a year in the planning stage."

This past summer, McNeese was designated a vocational teacher education training center by the State Department of Education. This permits in-service vocational teachers to take classes at McNeese to continue their teacher certification.

The university is presently developing new courses which will eventually lead to a program offering both graduate and undergraduate degree credit. Dr. Rex Smelser, recently retired director of Sowela Technical Institute, has been employed on a consultant basis and to teach courses.

It is hoped the degree programs can be initiated by the fall of 1972, Dr. Leary said.

A committee has been working on a coordinated sequential curricula for trade and vocational education in the Calcasieu Parish System, Sowela and McNeese to structure units of work to be covered in each phase of the vocation to be studied.

The development of such a program will prevent overlapping of units of work previously completed and will enable a student to progress smoothly from pre-vocational (high school) to vocational (Sowela Tech) to university level.

A Research and Demonstration Grant entitled Comprehensive Career Education Model has been approved and funded for Calcasieu Parish Schools which will enable the parish to hire a competent administrator to head up the collection of data necessary to determine the extent of the need for vocational education in Calcasieu Parish.

The federal grant from the Department of Health, Education, and Welfare will provide $100,000 for employment of a placement office for exiting secondary school students.

Six graduate assistants will also be employed to provide career education information and analyze data pertaining to students at the five schools in the pilot project.

New vocational education plan bared for area

A comprehensive plan for vocational education in Calcasieu Parish and Southwest Louisiana ranging from the elementary to the college graduate level was revealed Wednesday (Feb. 16) at a press conference in the office of Dr. Thomas Leary, president of McNeese State University.

Making the joint announcement were Dr. Paul Moses, superintendent of Calcasieu Parish Schools, P. O. White, acting director of Sowela Training Institute, and Dr. Leary.

The group of educators has been working over a year on the unique cooperative effort to coordinate vocational education at all levels. The programs involve students, vocational teachers and counselors.

Dr. Robert H. Pittman, vice president for academic affairs at McNeese, also participated in the conference, for which L. C. DeVall, McNeese director of public relations, served as moderator.

McNeese was designated a vocational teacher education training center by the State Department of Education this past summer. This permits in-service vocational teachers to take classes at McNeese to continue their teacher certification.

Teachers previously had to go to Baton Rouge or Northwestern to obtain this training, Dr. Leary said.

The university is in the process of developing new courses which will eventually lead to a program offering both graduate and undergraduate degree credit, he said.

Dr. Rex H. Smelser, who recently retired as director of Sowela Technical Institute, has been employed by McNeese to teach courses and assist in developing degree proposals to be presented to the State Board of Education and the Louisiana Coordinating Council for Higher Education for approval.

The degree programs will hopefully be initiated with the fall of 1972 semester, Dr. Leary said.

In addition to these developments, a committee has been working on a coordinated sequential curricula for trade and vocational education in the Calcasieu Parish system, Sowela, and McNeese.

The main purpose of the committee is to structure an outline of units of work to be covered in each phase of the vocation or trade to be studied.

The development of such a program would establish a time and sequence for all units of work in the trade and industrial sequential education curricula in the secondary schools of Calcasieu Parish, at Sowela and at McNeese.

A student will receive credit for the vocational training he has completed and will not have to repeat units of work previously completed if he transfers or graduates from one school to another participating in the program.

In order to facilitate the collection of data necessary to determine the extent of the need for vocational education in Calcasieu Parish, Dr. Moses and his staff developed a proposal for a federal grant from the Department of Health, Education, and Welfare.

Already approved for $100,000 funding, the program, entitled Comprehensive Career Education Model, is for the purpose of establishing demonstration, testing and development sites in Calcasieu Parish schools.

Objectives will be to develop and implement career guidance and counseling at the elementary school level which will be designed to increase the career awareness of students in terms of the broad range of options open to them in the world of work.

Also, to improve the guidance and counseling services at the junior high level with particular emphasis being given on career exploration.

At the senior high school level, the objective will be to improve guidance and counseling services and establish a placement service to insure the placement of all exiting students in either a job, a post-secondary occupational or a

continued

baccalaureate program.

In essence the project is intended to provide occupational familiarization to the students from the elementary school level through the secondary school level in order that they may be made more aware of the choices available to them in the world of work, Dr. Moses said.

The pilot project will be 18 months in duration and will involve five schools: Barbe Elementary, Reynaud Junior High, LaGrange Junior High, Welsh Junior High and Barbe Senior High.

A competent administrator will be employed to head up the project. He will work toward establishment of a placement office for exiting secondary students in Calcasieu Parish to provide these students with information regarding employment opportunities available on a full or part - time basis.

In addition, six fellowships for graduate study will be granted through McNeese State University. Five of these graduate fellows will be working as counselors in the pilot schools. Another will be employed to coordinate and analyze data collected pertaining to the students involved in the program.

The educators believe the program to be the first in the state organized on a local level and offering secondary, post secondary and university vocational education.

"We want to make it possible for the student of Southwest Louisiana to progress as far as he has the capability and desire to go," Dr. Leary said.

WED., MARCH 8, 1972, Lake Charles American Press

Career education program planned

The Calcasieu Parish School Board has employed Aubrey Derouen, business teacher at Lake Charles High School, to act as administrator for a $100,000 Comprehensive Career Education pilot program.

The decision was announced Tuesday after the board emerged from several hours in executive session.

The program, which is federally funded, is for the purpose of establishing demonstration, testing and development sites for career education in Calcasieu Parish schools.

Objectives are to develop and implement career guidance and counseling with emphasis on occupational familiarization at the elementary level.

At the junior high level, aims will be to improve guidance and counseling with emphasis on career exploration.

At the senior high level, the program will establish a placement service to insure exiting students either a job, post-occupational or a baccalaureate program.

The pilot will be of 18-months duration and will be implemented in five schools: Barbe Elementary, Reynaud Junior High, LaGrange Junior High, S. J. Welsh Junior High and Barbe Senior High.

Derouen is a graduate of Bell City High. He holds a BS in business education from McNeese University and a MED degree in administration and supervision from McNeese.

He has been employed for the past five years by the Calcasieu Parish School Board. He has been in the field of education for the past nine years.

Employment included a year and half at LaGrange Senior High and three and a half years at Lake Charles High. He has worked four years with the Louisiana State Department of Education as instructor and three years, part-time, teaching at Sowela Tech. He has also taught adult refresher course in secretarial science during summer months.

Derouen's responsibilities will include close contact with business and industry which includes establishing a file for potential employment of finishing students and determination of skills necessary for employment in various business and industries. He will also work closely with McNeese University and will be working with graduate fellows in five separate schools.

He is married to the former Betty Head, a counselor at Pearl Watson Junior High. The couple has three children.

Guidance Week has local angle

Observance of National Career Guidance Week, beginning today, Oct. 22, focuses attention upon the pilot project under way in the Calcasieu Parish school system, according to A. L. DeRouen.

DeRouen, placement officer for career education in Calcasieu Parish schools, said the local system is one of several which received grants for a career education pilot project from the Louisiana Department of Education.

The program embraces many areas of the school program, DeRouen said, particularly emphasizing guidance.

Career guidance involves resource personnel, vocational information, testing, employment counseling, individual counseling and job placement. Each element is designed to help the student make a decision on what he wants to do, DeRouen said.

Resource personnel consist of speakers with expertise who present talks to students concerning jobs, vocations, employment procedures, social security services and other aspects of employment.

Career guidance also provides materials such as books, pamphlets, films and filmstrips which tell about vocational opportunities.

The testing program provides students with information about themselves in terms of aptitudes, abilities and interests.

Employment counseling consists of informing students of skills necessary to obtain and hold a job. Individual counseling and job placement are also part of the guidance given in finding work, DeRouen said.

I., JANUARY 6, 1973, Lake Charles American Press

ake Charles career model adds ew depth for student growth

By **CAROLYN MOFFETT**
American Press Staff Writer

carrot-topped boy sat with his body into a concentration point.

energies were directed toward filling lice accident form.

young seventh-grader is not a junior He is one of the students participating 00,000 career education program being ented at five Lake Charles schools ded under a research and development om the Department of Health, Edu- nd Welfare

career education model, one of two in (another is in Lafayette), is designed of a comprehensive vocational plan d jointly by the Calcasieu Parish Board, McNeese University and Sowela al Institute for Calcasieu Parish and st Louisiana.

pilot offering, funded through August, aimed at developing occupational ization from an early age culminating alized training and placement at the ry or post-secondary levels.

provide career counseling and collect t data for implementation of the on a parish-wide basis, six McNeese students have been granted fellow- work in the five schools (Barbe ary, Reynaud S. J. Welsh and ge Middle Schools and Barbe High

king as counselors are Mrs. Laura Carl Ambrose, Mrs. Sammy Sherp, Nourrcier, and Marie Foret. Douglas coordinates and analyzes data. A. L. heads the project.

uen's duties as director include ing a placement office for graduating and maintaining a liason with in- nd business to determine the specific r vocational training.

he elementary level, the program is to create awareness of the broad occupations through role-playing, and s to actual job sites, visual aids and of community workers on a consultant

achers don't have to be specially pre- bring in career education," according Fruge, career counselor at Barbe ary School.

teacher may use her own creativity chool can study its very own com- even professions within the school it- e added.

"Career education to me is like the vowel in two consonants. You can slip it into all areas of teaching. It's for every child—not just for the deprived child," she said.

Mrs. Fruge is drawing from familiar area occupations to develop a curriculum guide on the world of work which can later be made available to Calcasieu Parish teachers. "These children will grow up in this area and we feel it is very important that they be acquainted with jobs available here."

A field trip for example, featured an excursion on a shrimp boat on which the children interviewed shrimpers and boatmen. Also planned is the construction of a model home.

A local contractor is providing materials and will act as tour guide on a field trip to houses in four different stages of construction.

Mrs. Fruge is also developing units on rice farming, municipalities, and merchandising.

"The response is fabulous," Mrs. Fruge says. "Parents, children—the community, seem to love it. The excitement generated by the interchange between students and community workers carries into other areas of learning," she says.

At the junior high level, counselors are working to provide students with an actual "hands on" experience in a wide sampling of career offerings.

For example, job experience kits available in the career resource room at S. J. Welsh Middle School, contain actual tools of a trade. The kits enable a student to sample 18 occupations ranging from accountant to X-Ray technician.

Also available are video-tapes, career briefs, take-out literature, books and taped information on the more than 800 occupations listed by the U.S. Department of Labor in its "Occupation Outlook Handbook."

In addition to the resource room, enrichment offerings at Welsh are being adapted to allow students to investigate within the 15 career clusters outlined by the Office of Education.

(Jobs within a given cluster are interchangeable with a minimum of retraining).

"This is an attempt to make school relevant," according to Charles Oakley, principal at S. J. Welsh. Oakley says the career program aims at developing a realistic view of the world of work thus enabling students to develop salable skills.

The program will not only help prevent school dropouts but it will also enable students to make a smooth transition to Barbe High School, a comprehensive-vocational school, Oakley believes.

Enthusiasm for the career education pilot is high at S. J. Welsh, according to Mrs. Nourccier, the career counselor.

"At certain times the student reponse has been so great we have had to turn youngsters away," she said.

"I go to the career room every chance I get," says a seventh-grade boy who claims he has already been through almost the entire collection of job-experience kits. "Yesterday, I tried being a lawyer," he confides. "It's fun."

The program offers training in specific career areas at the high school level, according to Derouen, director of the research project.

"We hope by the time a child has reached the ninth grade he will be prepared to choose within one of the 15 cluster areas."

Mrs. Marie Foret, counselor at Barbe High School, must overcome the knowledge gap of high school students who have not been made occupationally aware.

"We have to create awareness at the high school level now because these students didn't have the advantage of early career education," Mrs. Foret explains.

Mrs. Foret works to integrate vocational information into the regular subject offerings at Barbe, acting as a resource person for the teachers.

She also aids students in selecting colleges suitable to career or porfessional aspirations and assists in immediate job placement for students not college-bound.

Success of the program seems to be an over-riding concern for the counselors at all levels of the research model.

To a large extent, the survival of the career education program depends upon its reception by the community, Derouen, the director, says. Community involvement is the pivotal key which could lock in the vocational approach, he maintains.

Talented counselors are also crucial to establishing a permanent plan and each was "hand - picked" for special abilities, dedication to career-education precepts, and enthusiasm, Derouen says.

The conviction that career education is a critical need of American education is reflected in the determined mood in whch counselors discuss the pilot program.

"It is the dream of a lifetime," one summarized. "It will work . . . because it MUST work."

Career education--'poor cousin' is emerging

The need for relevancy in today's complex technological society has made career education a growing trend in American education.

High absentee and drop-out rates are a silent indictment of the educational system. They bear testimony that a restructuring is needed not only to shape the curriculum to meet the constantly changing demands of the labor market but to enable youngsters to achieve maximum personal fulfillment as human beings.

Educators throughout the nation are recognizing the need to prepare youngsters for one of the most important decisions of a lifetime — choosing a career.

"Education's most serious failing is its self - induced voluntary fragmentation. The most grievous example of this is the false dichotomy it makes between things academic and things vocational," says Sidney P. Marland, Health, Education and Welfare assistant secretary, and former U.S. Commissioner of Education.

Career education should be a top priority, Marland believes. "All education is career education — or should be. I propose that a universal goal of American education, starting now, be this — that every young person completing his school program at grade 12 be ready to enter either higher education or useful and rewarding employment."

In July, the National Education Association (NEA) Assembly passed a resolution stating, "the NEA believes that preparation for children for careers, vocations, and productive jobs should be a basic policy of education. Educational programs should be developed for all children which will assure equal opportunity for career and occupational development.

"A continuing program for training, retraining, advancement and promotion should be provided to out - of - school youth and adults."

The Association pledged to seek legislation to achieve these ends.

There are currently only about 15 per cent of the U.S. high school population enrolled in any type of vocational education program. With only about 25 per cent of all high school graduates attaining college degree status, there remains about 60 per cent that are vocationally untrained and in need of jobs.

Nationwide, only about 20 per cent of all jobs require a full college degree. But many of those enrolled in vocational training programs are receiving outdated instruction and many at the college level are not equipped with specific job skills.

State training programs presently are filling only about half the entry - level jobs available each year. The other half are being filled with the occupationally untrained.

Marland has outlined a four - point plan to effect major improvements in the area of vocational education: better state training programs aimed at educating where national needs will be high; more flexible options for high school graduates to enter the world of work or continue with higher education; closer contact between schools and business, industry and labor; and building leadership at federal, state, and local level with a new committment to the concept of career education.

Although Marland has stressed the fact that career education is one of the top priorities of the Office of Education, in terms of spending levels, this is not so.

In fiscal year 1972, Congress authorized $895 million but appropriated only $489 million for vocational education. The available money is allotted to states under a formula based on population age group and per capita income. These funds must be matched at the state and local levels, except for courses for the disadvantaged or handicapped, which are 100 per cent federally financed.

The funds are earmarked for states by the 1968 Vocational Amendments. Ten per cent is set aside for research, 25 per cent is designated for the handicapped and disadvantaged and 15 per cent must be used at the post-secondary level.

The remainder of the allotment can be used for innovative and experimental programs at the state level, providing they meet certain requirements.

Additional funds are available for consumer and homemaking education and cooperative vocational education. Funding approval has also been granted to some short - term vocational projects such as work - study, residential vocational schools for the unemployed, and model demonstration projects.

It is estimated that the cost of career education is 15 to 30 per cent higher than academic education. Educators contend that major adjustments would have to be made in the present educational system in terms of staffing, use of facilities, scheduling, and teachers' pay in order to make career education available to all students.

The concept of vocational or career education is not new. It has traditionally been "education's poor cousin" as Marland terms it.

Academians viewed vocational education as influencing students not to pursue a college career and giving training in manual skills. An unbridgable educational gap was created by the insistence that different credits be given to vocational students—thus automatically excluding them from entering a college degree program. Vocational education had become a negative status symbol.

Such thinking led to the establishment of post - secondary vocational training institutions. It was not until about 12 years ago, however, that career education gained a second impetus through the President's Panel of Consultants on Vocational Education. The panel made a thorough study [illegible] with an [illegible] resulting [illegible] to [illegible]

The panel's recommendations formed the basis of the Vocational Education Act of 1963, an attempt to modernize vocational education which increased federal funding from $57 million to $279 million.

Educators called the approach career education rather than vocational to designate the new approach as an attempt to end the distinction between academic and vocational education in the school systems.

Vocational education includes such aspects as:

▶Training for specific skills.

▶Retraining for those whose jobs have eliminated by mechanization.

▶Technical courses for aids.

▶Cooperative programs where students spend alternate periods of time in study and paid course - related jobs.

▶Work - study programs for providing financial aid for students through public jobs.

▶Programs at various grade levels to acquaint students with the world of work and the variety of careers open to them.

—MOFFETT

A 'hands on' experience

Richard Wegener

Occupational awarencess

Mrs. Sandra Nourrcier, Danny Nolen

Students responding

Keith Olmsted, Sam Mancuso, Dena Gaspard

FRI., JANUARY 19, 1973 LAKE CHARLES AMERICAN PRESS

DeRouen gives talk on career education

A talk on the Career Educational Program was presented by A. L. "Buddy" DeRouen career research and development personnel officer for the Calcasieu Parish School Board, at the Lake Charles Kiwanis Club meeting.

DeRouen said that the board had a federal grant of $104,000 to research and develop such a program from March 16, 1972, to August of 1973.

He said that the schools selected for participation in the research program were one elementary school—Barbe; three middle schools — Reynaud, LaGrange and S. J. Welsh; and one high school — Barbe.

DeRouen said that 1½ million students are getting out of school who are "displaced." He said, "they may have academic training, but they don't have a saleable skill."

A film put out by the Health, Education and Welfare Department was also shown. In it, President Nixon cited the need for career education in the schools to do more for the self-reliance and self - efficiency of the students, which would be of great value to them when they get out of school.

A narrator for the film said that the post - industrial society depends on human resources.

Sam Levingston was presented a 30-year Kiwanis merit award from the Baton Rouge Kiwanis Club of which he is a former member. The presentation was made during the meeting.

President Norman Robinson presided at the meeting, held in the Charleston Hotel.

WED., JAN. 24, 1973 LAKE CHARLES AMERICAN PRESS

Career education is called 'hot topic of the day'

Career education is the "hot topic of the day" in educational circles Frank Jernigan, assistant superintendent of Calcasieu Parish Schools, told the Calcasieu Kiwanis Club at its Tuesday noon meeting at the Downtowner Motel.

Jernigan said career education has reached national prominence due to its popularity with Sidney P. Marland, assistant secretary of Health, Education, and Welfare. It is also a very popular issue on the state level being State Superintendent Louis Michot's "number 1 priority."

Jernigan gave the club a brief outline of the pilot program of career education now being conducted in Calcasieu and Lafauette parishes. The program, federally funded, will end in August of 1973.

The program begins, Jernigan said, in the first grade. The first graders are made aware of many different types of jobs and learn to relate personally to the different jobs. "They don't only learn about the mailman or the milkman but they meet a mailman and a milkman," Jernigan said. Different types of workers come to talk to the students and tell them about their job.

This process of informal learning about various occupations continues until grades five and six. During these latter years, Jernigan said, the students begin to explore jobs. Packets are made available to the students describing the 15 clusters or categories of jobs into which the Department of Labor has divided all of the 20,000 occupations listed in the Directory of Occupational Titles.

During his investigations, the student learns about the type of work involved, the hours usually worked and the education necessary. The student thus zeroes in on a particular career interest, Jernigan said.

In the middle school years — sixth, seventh and eighth grades — the students are engaged in "hands - on - experience," according to Jernigan. For each of the six six-week periods the children in the pilot program alternate in taking chorus, strings, band, typing, arts and crafts, and home and family living as enrichment subjects.

These subjects give the student actual experience in a variety of fields.

When the students reach the nirth grade, Jernigan said, they are encouraged to schedule as electives those subjects which relate to their particular field of interest. For example, a girl who is particularly interested in secretarial work, he said, could schedule shorthand or some other related subject.

When this particular student becomes a senior in high school, she is placed in the Cooperative Office Education program whereby she goes to school for half a day and works in some clerical capacity in a participating firm during the rest of the day.

According to Jernigan, not only does the girl get rewarding experience from her work, but she also gets school credit as well as pay for the four hours a day she puts in.

By the time a student graduates from high school, Jernigan said, he should have a "salable skill" which he could use to become an apprentice in his field or to further his knowledge by continuing on in college.

Jernigan emphasized the fact that career education does not take the place of higher education, but it does give the student a skill which he could use in obtaining a job if he does not choose to further his studies.

He said he believes career education is a vital part of education and that public support is needed to extend the program. He also said when the pilot program expires in August the school board will send a draft to Superintendent Michot insisting on state aid to continue the program.

WED., MARCH 28, 1973 LAKE CHARLES AMERICAN PRESS

Interview handled by fifth grader

A Barbe Elementary School fifth-grader turned the tables on School Board member Dale Bernard Tuesday night when he conducted an on-the-spot job interview during the Calcasieu Parish School Board meeting.

Troy Morgan. who quizzed Bernard about his job. was one of three Barbe youngsters who "stole the show" during a presentation on a career education model in five Lake Charles schools.

Vicki Lewis recited a poem. "When I Grow Up." and Tracey Fruge described a visit to the Lake Charles City Police station.

Also on the program were five McNeese graduate students. serving as resource personnel for the U.S. Department of Education. Research and Development project.

Describing the development of the career education program for Calcasieu Parish were Mrs. Laura Fruge. Barbe Elementary; Mrs. Sammy Cherp. LaGrange Middle School; Mrs. Sandy Nourrcier. S. J. Welsh Middle School; Carl Ambrose. Reynaud; Marie Foret. Barbe High. A sixth graduate student. Doug Chance. collects and analyzes data for the $100,000 project.

WED., MARCH 28, 1973, Lake Charles American Press 39

Rotary officers are announced

Newly elected members of the Lake Charles Rotary Club's board of directors were announced by President David Painter at Tuesday's luncheon meeting in the Charleston Hotel.

They are: John Broussard, Carl Coco, Ed Godwin, Charles Henderson, Ed Lively, Fred Nodier, and Wade Watts.

A talk on "Career Education in Calcasieu Public Schools" was presented by A. L. "Buddy" Derouen who is with the career, research and development department of the Calcasieu Parish School Board.

Derouen said that through a federal grant of $104,000, a pilot career educational program is being presented in five schools — Barbe Elementary, LaGrange, Welsh and Reynaud Middle Schools; and Barbe High School.

There are phases of the career education program where the children first learn "awareness" of a career and then "hands-on" experience, Derouen said.

He said that the children have visited the fire station to learn what a fireman's job involves, they've had a postman talk to them, they've gone out on a shrimp trawler, they've visited farms — just to mention some of the experiences involved in their learning about careers.

They are also able to view slide film on various careers in which they may express an interest.

There are opportunities for those interested to learn woodshop working and upholstering.

There is Cooperative Office Education (COE) for older students interested in office work.

He said that even if a student goes on to college, he will have some skill he can fall back on in addition to his academic training.

Derouen showed color slides in conjunction with his talk. He was introduced by "Skip" Robinson.

Kenneth Peavy, who is helping to organize a Rotaract Club (Rotary's organization for young men under age 29), spoke briefly. He said another organizational meeting will be held April 5 in the Suffolk Manor recreation room.

Career Day set Friday at Barbe

Career Day will be held Friday, April 28 for Barbe High School juniors, according to Principal John S. Nicosia.

The program is designed to familiarize students with what is involved in careers that interest them. Coordinating the program are Dorothy Akins and Mrs. Mary Ann Viator, guidance counselors.

Scheduled speakers include Bill Reigel, McNeese basketball coach, opening assembly speaker; Enos Darbonne and Dowell Fontenot, both of McNeese, health and physical education; Dr. Johnny Moffett, medicine; Larry Coker of McNeese, animal science.

Also, Jack Kreuzenberg of Sowela Tech., auto mechanics; Russell Bellow, social worker; Betty Rion of Kelly Services, secretarial work; Glen Hathaway of the YMCA, sports and recreation; Dr. Maurice Pullig of McNeese and Gary Tyler of KPLC - TV, radio and television.

Also, Dianne Abel, airline hostess; Patty Robinson and Mrs. Cleo Bingham of the Calcasieu Parish schools, special education; John Armstrong of PPG Industries, engineer; Arthur Hollins of Hollins and Schram, accounting and bookkeeping.

Also, Tommy Bergstead, law; Dr. Norman Smith of McNeese, music; Rose Butler of South-Central Bell, telephone operator; Dr. Jesse Feist of McNeese, psychology; Marc Pettaway of ACTS, dramatics; Paul Jackson of the Louisiana Wildlife and Fisheries Commission; Dr. Thomas Brand of McNeese, early childhood education.

Also, Kathleen Boudreaux of McNeese and Terry Robideaux of Profile 2, art; Mrs. Nola Mae Ross of McFillen Air Charter, aviators; Zona Dale Taylor of McNeese, home economics; Jimmy Cochron of Architecture Six, architecture; George Campbell of the FBI, law enforcement.

THE BARBE WIRE

VOL. 2, NO. 6 BARBE HIGH SCHOOL, LAKE CHARLES, LA. MONDAY, APRIL 9, 1973

Future technician

Mrs. Marie Foret, career counselor, instructs Jackie Martin in the use of one of the many career experiment kits available to students. Jackie studies processing and developing of X-rays.

PILOT SCHOOL

Career programs offer first-hand experiences

Barbe High School is one of the five schools to be chosen for an experimental Career Pilot Program in Calcasieu Parish.

From 8:30 a.m.-12:30 p.m. everyday, the Career Guidance Office is open. Students may use various job experience kits with actual working tools such as pipes, electrical hook-ups, draftsman tools and others related to vocational trades. For more highly professional training one may use filmstrips, cassette tapes and a file of information on every known career in the United States.

Career guidance counselor, Mrs. Marie Foret, commented, "Seventy per cent of all Americans make their job choice on the basis of the first job opportunity they receive--a casual response to a want ad in the paper. It's quite a gamble to let chance run one's life."

The Houston Post ran an article which said that an average person beginning work in this decade would probably change jobs four times due to the rapidly changing technology in America.

Even the job one studies about today may not be in existance tomorrow. This is why it is necessary to have a wide knowledge of various related careers in special fields of interest.

Of those students currently in high school, only three out of ten will go to academic college-level work. One-third of these will drop out before getting a baccalaurate degree. That means that eight out of ten high school students should be getting occupational training of some sort. But only two out of eight are getting such training.

A total of 1.5 million persons left school last year with no determinable place to go in society. Not all were drop-outs. Nearly one-half were graduates who had received no marketable skills for their twelve years of schooling.

The main purpose of education is to help each individual gain knowledge skill, habits and traits needed to prepare him for a healthy, happy, and useful life.

Career guidance is available, along with the Trades and Industries program, to further skills and knowledge. Academic teachers in the classroom are attempting to publicize careers related to their subject matter.

Career Education is a revolutionary idea in American schools. Counselors, teachers and administrations are becoming interested in helping students receive the education and experience needed for their chosen vocation. At an early age students are exposed to various jobs by means of field trips and speakers at schools. Determining a field of interest plays an important role in Career guidance.

Psychological studies conclude that a person's job not only satisfies many of the basic needs of life such as food and shelter, but initiates a feeling of belonging, self-respect, independence and self-actualization. One's career will determine his way of life and entire social and economic status.--WILLIAMS

MONDAY, JUNE 11, 1973, Lake Charles American Press

Area personnel attend career education meet

BATON ROUGE—A group of Calcasieu Parish educators will take part in the Career Education Conference at Louisiana Tech University, through June 15.

Aubrey L. DeRouen, placement officer for career education from the Calcasieu Parish School Board will make a presentation on the Calcasieu Parish Career Education Program. This Parish has been involved in a Research and Development Project for Career Education in five parish schools. The project was funded through the Federal Vocational Education Act.

Mr. DeRouen will be assisted [illegible], Elementary School Counselor, Sandy Nourmier, Middle School Counselor, and Marie [illegible], High School Counselor, all of Calcasieu Parish.

APPENDIX C

TABLE CLIV

Summary of First Career Choice Lists

First Career Choice	No. of Students	Exiting		Grade Level Continuing Program						Percent of Total
		12		11		10		9		
		M	F	M	F	M	F	M	F	
Accounting	48	3	9	5	10	8	6	2	5	4.78
Advertising/PR	8	2	0	1	3	1	1	0	0	0.80
Agriculture	13	2	0	5	0	2	1	3	0	1.29
Architecture	39	6	1	17	1	10	0	4	0	3.88
Art	43	2	7	3	8	4	12	1	6	4.28
Auto Mechanics	58	6	0	11	0	17	0	24	0	5.77
Aviation	25	2	0	1	0	9	1	5	2	2.49
Banking/Finance	20	0	4	0	5	6	1	2	2	1.99
Broadcasting/TV	7	0	1	2	0	1	2	0	1	0.70
Camping/Hiking	18	1	1	3	1	3	3	6	0	1.79
Chemistry	7	1	0	2	1	2	0	1	0	0.70
City Management	1	0	0	0	0	0	0	1	0	0.10
Conservation	12	0	1	1	1	1	1	6	1	1.19

TABLE CLV

Summary of First Career Choice Lists

First Career Choice	No. of Students	Exiting		Grade Level Continuing Program						Percent of Total
		12		11		10		9		
		M	F	M	F	M	F	M	F	
Construction	16	5	0	6	0	1	0	3	1	1.59
Dentistry	19	5	1	4	0	1	0	8	0	1.89
Dramatics	12	2	2	0	2	1	1	1	3	1:19
Electronics	36	7	0	5	0	10	0	14	0	3.58
Engineering	32	6	0	8	0	12	0	5	1	3.18
Field Sports	49	8	0	8	0	13	0	19	1	4.88
Fire Service/Rescue	3	1	0	1	1	0	0	0	0	0.30
Food Management	3	1	0	1	0	0	0	0	1	0.30
Forestry	12	2	1	5	0	1	2	1	0	1.19
Government	5	2	0	1	1	0	0	0	1	0.50
Interior Decorating	19	0	2	0	3	0	5	0	9	1.89
Insurance/Real Est.	7	2	0	1	0	2	0	2	0	0.70
Journalism	9	1	0	1	2	0	2	2	1	0.90
Law	64	14	3	7	2	15	3	11	9	6.37

TABLE CLVI

Summary of First Career Choice Lists

First Career Choice	No. of Students	Exiting 12		Grade Level Continuing Program 11		10		9		Percent of Total
		M	F	M	F	M	F	M	F	
Law Enforcement	11	2	0	2	0	2	0	3	2	1.09
Machinist	2	0	0	0	0	0	0	2	0	0.20
Manufacturing	15	0	3	1	1	1	7	0	2	1.49
Mechanical Drawing	3	0	0	1	0	1	0	1	0	0.30
Medicine	74	4	4	13	11	8	11	16	7	7.36
Military	15	3	0	4	0	3	0	5	0	1.49
Mortician	1	0	0	0	0	0	0	1	0	0.10
Music	26	1	1	3	3	3	5	3	7	2.59
Natural Science	6	2	1	1	1	0	0	1	0	0.60
Optometry	1	0	1	0	0	0	0	0	0	0.10
Plumbing	8	1	3	1	0	1	1	0	1	0.80
Pharmacy	1	0	1	0	0	0	0	0	0	0.10
Psychology	31	1	5	3	8	3	7	1	3	3.08

TABLE CLVII

Summary of First Career Choice Lists

First Career Choice	No. of Students	Exiting 12 M	Exiting 12 F	Grade Level Continuing Program 11 M	11 F	10 M	10 F	9 M	9 F	Percent of Total
Purchasing/Marketing/Sales	14	2	2	2	1	2	2	3	0	1.39
Refrigeration/AC	28	7	0	9	0	8	0	4	0	2.79
Seamanship	18	2	0	3	0	4	1	5	3	1.79
Social Service	22	0	5	1	7	1	6	0	2	2.19
Space/Physics	3	0	0	1	0	1	0	1	0	0.30
Sports/Recreation	46	1	3	10	8	6	2	13	3	4.58
Teaching/School Adm.	65	0	13	2	15	1	11	0	23	6.47
Telephone/ Communications	7	0	2	0	2	1	2	0	0	0.70
Transportation	4	2	0	1	0	0	0	0	1	0.40
Veterinary Medicine	39	3	5	4	3	7	6	6	5	3.88
Woodworking	14	3	0	4	0	4	0	3	0	1.39
Miscellaneous	5	0	0	0	0	0	1	2	2	0.50

First Choice: Accounting

Total 48
M - 18
F - 30

Grade 9 2M/5F
10 8M/6F
11 5M/10F
12 3M/9F

Second Choice

Advertising/PR
Architecture
Art
Aviation
Banking & Finance
Broadcasting
Dramatics
Engineering
Insurance & Real Estate
Interior decorating
Law
Military
Petroleum
Psychology
Social Service
Seamanship
Sports & recreation
Teaching (Sch. Adm.)
Veterinary Medicine

Third Choice

Agriculture
Art
Aviation
Banking & finance
Conservation
Forestry
Government
Insurance & Real estate
Interior decorating
Journalism
Law
Manufacturing
Music
Natural Sciences
Optometry
Plumbing
Refrigeration
Seamanship
Space & physics
Sports & recreation
Telephone/Communication

First Choice: Advertising and Public Relations

Total 8
M - 4
F - 4

Grade 9 0M/0F
10 1M/1F
11 1M/3F
12 2M/0F

Second Choice

Law Enforcement
Medicine
Military
Music
Purchasing, Marketing, Sales
Sports & recreation

Third Choice

Architecture
Broadcasting & Television
Purchasing, Marketing, Sales
Psychology
Social service
Teaching & Sch. Administration
Transportation

First Choice: Agriculture

Total 13

M - 12

F - 1

Grade	9	3M/0F
	10	2M/1F
	11	5M/0F
	12	2M/0F

Second Choice:

Auto mechanics

Aviation

Conservation

Engineering

Forestry

Law

Refrigeration

Veterinary Medicine

Woodworking

Third Choice

Engineering

Field sports

Forestry

Law enforcement

Sports & recreation

Veterinary Medicine

First Choice: Architecture

Grade	9	4M/0F
	10	10M/0F
	11	17M/1F
	12	6M/1F

Total 39

M - 37

F - 2

Second Choice:

Accounting

Art

Aviation

Camping, hiking

Construction

Dentistry

Engineering

Field sprots

Forestry

Government

Insurance & real estate

Interior decorating

Journalism

Law

Law Enforcement

Mechanical Drawing

Military

Music

Plumbing

Printing

Sports & recreation

Veterinary Medicine

Woodworking

Third Choice:

Aviation

Broadcasting

Clergy/Religion

Dentistry

Electronics

Engineering

Field sports

Forestry

Insurance & real estate

Interior decorating

Law

Mechanical Drawing

Medicine

Military

Music

Petroleum

Psychology

Refrigeration

Seamanship

Space/Physics

Telephone/Communications

Transportation

Woodworking

First Choice: Art

Grade	9	1M/6F
	10	4M/12F
	11	3M/8F
	12	2M/7F

Total	43
M	10
F	33

Second Choice:

Advertising/Public Relations
Agriculture
Camping & hiking
Construction
Dramatics
Food management
Graphic Arts
Interior decorating
Journalism - newspaper
Medicine
Music
Purchasing, Marketing, Sales
Social Service
Sports & recreation
Teaching/Sch. Administration

Third Choice:

Broadcasting & TV
Camping & hiking
Dentistry
Electronics
Field sports
Insurance & real estate
Interior Decorating
Law
Miscellaneous
Music
Plumbing
Social Service
Sports & recreation
Veterinary Medicine
Woodworking

First Choice: Auto Mechanics

Total 58
M - 58
F - 0

Grade 9 24M/0F
10 17M/0F
11 11M/0F
12 6M/0F

Second Choice:

Agriculture
Aviation
Banking & Finance
Conservation
Construction
Electronics
Engineering
Field sports
Fire service & rescue
Law Enforcement
Machinist
Mechanical Drawing
Military
Pharmacy
Plumbing
Refrigeration
Sports & recreation
Transportation
Woodworking

Third Choice:

Accounting
Advertising/Public Relations
Aviation
Camping & hiking
Electronics
Engineering
Field sports
Law enforcement
Machinists
Mechanical Drawing
Military
Music
Plumbing
Purchasing, Marketing, Sales
Refrigeration
Seamanship
Sports & recreation
Telephone/Communications
Woodworking

First Choice: Aviation

Grade	9	5M/2F
	10	9M/0F
	11	7M/0F
	12	2M/0F

Total 25
M - 23
F - 2

Second Choice:

Architecture
Auto mechanics
Broadcasting
Electronics
Field sports
Mechanical Drawing
Medicine
Military
Music
Refrigeration
Seamanship
Social services
Space/Physics
Sports & recreation
Veterinary Medicine

Third Choice:

Architecture
Camping, hiking
Electronics
Field sports
Law enforcement
Meteorology
Mortician
Music
Plumbing
Psychology
Refrigeration/AC
Seamanship
Social services
Space/Physics
Sports, recreation
Telephone/Communications
Veterinary Medicine

First Choice: Banking & Finance

Grade	9	2M/2F
	10	6M/1F
	11	0M/5F
	12	0M/4F

Total	20
M	8
F	12

Second Choice:

Accounting
Art
Auto mechanics
Broadcasting/TV
Conservation
Interior decorating
Medicine
Miscellaneous
Music
Seamanship
Transportation
Veterinary Medicine

Third Choice:

Accounting
City Management
Dentistry
Dramatics
Field sports
Forestry
Manufacturing
Music
Psychology
Purchasing, Marketing, Sales
Teaching, Sch. Adm.
Veterinary Medicine

First Choice: Broadcasting & Television

Total 7
M - 3
F - 4

Grade 9 0M/1F
10 1M/2F
11 2M/0F
12 0M/1F

Second Choice:

Government
Law
Medicine
Music
Seamanship
Sports/Recreation

Third Choice:

Law
Music
Psychology
Sports/Recreation
Telephone/Communications

First Choice: Camping, Hiking

Total 18
M - 13
F - 5

Grade	
9	6M/0F
10	3M/3F
11	3M/1F
12	1M/1F

Second Choice:

Broadcasting
Field sports
Forestry
Law
Medicine
Sports/Recreation

Third Choice:

Auto mechanics
Interior decorating
Military
Miscellaneous
Refrigeration
Seamanship
Social services
Sports/recreation

First Choice: Chemistry

Grade	9	1M/0F
	10	2M/0F
	11	2M/1F
	12	1M/0F

Total	7
M	6
F	1

Second Choice:

Architecture

Aviation

Manufacturing

Medicine

Natural sciences

Third Choice:

Manufacturing

Meteorology

Seamanship

Space/physics

Sports/recreation

First Choice: Dentistry

Total 19
M 18
F 1

Grade 9 8M/0F
10 1M/0F
11 4M/0F
12 5M/1F

Second Choice:

Advertising & Public Relations
Agriculture
Art
Banking and Finance
Chemistry
Engineering
Journalism
Law
Medicine
Mortician
Psychology
Seamanship

Third Choice:

Agriculture
Camping & hiking
Conservation
Data Processing
Engineering
Field sports
Interior decorating
Law
Military
Mortician
Plumbing
Purchasing/Marketing/Sales
Seamanship
Veterinary Medicine

First Choice: City Management
Second Choice: Field sports
Third Choice: Pharmacy

Total 1
M - 1
F - 0

First Choice: Conservation

Grade 9 6M/1F
10 1M/1F
11 1M/1F
12 0M/1F

Total 12
M - 8
F - 4

Second Choice:

Auto mechanics
Aviation
Field sports
Forestry
Miscellaneous
Social service
Veterinary Medicine

Third Choice:

Auto mechanics
Aviation
Field sports
Miscellaneous
Music
Seamanship
Sports/recreation
Teaching/Sch. Administration

First Choice: Dramatics

Grade 9 1M/3F
10 0M/2F
11 1M/1F
12 2M/2F

Total 12
M 4
F 8

Second Choice:

Art
Broadcasting/TV
Field sports
Law
Psychology

Third Choice:

Interior decorating
Law
Music
Natural sciences
Psychology
Seamanship
Social services

First Choice: Construction

Total 16
M - 15
F - 1

Grade 9 3M/1F
10 1M/0F
11 6M/0F
12 5M/0F

Second Choice:

Agriculture
Electronics
Engineering
Field sports
Law enforcement
Machinist
Refrigeration/AC
Sports/recreation
Transportation
Woodworking

Third Choice:

Architecture
Art
Auto Mechanics
Engineering
Field sports
Law enforcement
Machinist
Mathematics
Military
Miscellaneous
Seamanship
Woodworking

First Choice: Electronics

Total 36
M - 36
F - 0

Grade 9 14M/0F
10 10F/0F
11 5M/0F
12 7M/0F

Second Choice:

Agriculture
Architecture
Auto mechanics
Aviation
Chemistry
Conservation
Construction
Dentistry
Engineering
Field sports
Law
Music
Plumbing
Refrigeration
Telephone/Communication

Third Choice:

Accounting
Architecture
Auto mechanics
Banking/finance
Camping, hiking
Conservation
Engineering
Field sports
Insurance/Real Estate
Journalism-Newspaper
Law
Law enforcement
Music
Petroleum
Purchasing/Marketing/Sales
Refrigeration/Air Cond.
Seamanship
Sports/recreation
Telephone/Communications
Woodworking

First Choice: Engineering

Grade 9 5M/1F
10 12M/0F
11 8M/0F
12 6M/0F

Total 32
M - 31
F - 1

Second Choice:

Agriculture
Architecture
Art
Auto mechanics
Aviation
Camping/hiking
Construction
Electronics
Field sports
Insurance/Real Estate
Law
Law Enforcement
Manufacturing
Mathematics
Mechanical Drawing
Space/Physics
Sports/Recreation
Teaching/Sch. Adm.

Third Choice:

Architecture
Art
Auto mechanics
Aviation
Camping, hiking
Dentistry
Electronics
Field sports
Forestry
Insurance/Real Estate
Journalism/Newspaper
Law
Law Enforcement
Manufacturing
Mathematics
Medicine
Music
Petroleum
Refrigeration/AC
Seamanship
Sports/Recreation

First Choice: Field Sports

Total 49
M - 48
F - 1

Grade 9 19M/1F
10 13M/0F
11 8M/0F
12 8M/0F

Second Choice:

Art
Auto mechanics
Camping/hiking
Conservation
Construction
Dentistry
Engineering
Forestry
Fire Service/Rescue
Law
Law enforcement
Machinist
Mathematics
Medicine
Miscellaneous
Music
Natural Science
Petroleum
Pharmacy
Sports/Recreation
Veterinary Medicine

Third Choice:

Accounting
Architecture
Auto mechanics
Aviation
Conservation
Dentistry
Electronics
Forestry
Insurance/Real Estate
Law enforcement
Machinist
Mechanical Drawing
Medicine
Meterology
Military
Miscellaneous
Mortician
Natural Science
Refrigeration
Seamanship
Space/Physics
Sports/Recreation
Veterinary
Woodworking

First Choice: Fire Service/Rescue

Total 3
M - 2
F - 1

Grade 9 0M/0F
10 0M/0F
11 1M/1F
12 1M/0F

Second Choice:

Aviation
Forestry
Manufacturing

Third Choice:

Camping/hiking
Military

First Choice: Food Management

Total 3
M - 2
F - 1

Grade 9 0M/1F
10 0M/0F
11 1M/0F
12 1M/0F

Second Choice:

Architecture
Food management
Insurance/Real Estate

Third Choice:

Food Management

First Choice: Forestry

Grade 9 1M/0F
10 1M/2F
11 5M/0F
12 2M/1F

Total 12
M 9
F 3

Second Choice:

Conservation
Field sports
Journalism-Newspaper
Music
Sports/Recreation
Teaching/Sch. Adm.
Telephone/Communication

Third Choice:

Auto mechanics
Conservation
Engineering
Field sports
Music
Refrigeration
Veterinary Medicine
Woodworking

First Choice: Government

Grade 9 0M/1F
10 0M/0F
11 1M/1F
12 2M/0F

Total 5
M 3
F 2

Second Choice:

Food management
Law
Natural Science
Psychology

Third Choice:

Banking/Finance
Dramatics
Natural Science

First Choice: Interior Decorating

Total 19
M 0
F 19

Grade 9 0M/9F
10 0M/5F
11 0M/3F
12 0M/2F

Second Choice:

Architecture
Art
Dramatics
Transportation

Third Choice:

Architecture
Art
Camping/hiking
Fire service/rescue
Government
Law Enforcement
Music
Social Service
Sports/Recreation
Teaching, Sch. Adm.

First Choice: Insurance/Real Estate

Total 7
M - 7
F - 0

Grade 9 2M/0F
10 2M/0F
11 1M/0F
12 2M/0F

Second Choice:

Banking/Finance
Law
Plumbing
Telephone/Communication
Woodworking

Third Choice:

Aviation
Plumbing
Refrigeration/AC
Seamanship

First Choice: Journalism - Newspaper

Total 9
M - 5
F - 4

Grades 9 2M/1F
10 0M/2F
11 1M/2F
12 1M/0F

Second Choice:

Broadcasting/TV
Dramatics
Field sports
Law
Mortician
Sports/Recreation
Teaching/Sch. Adm.

Third Choice:

Camping/hiking
Field sports
Law
Music
Psychology

First Choice: Law

Total 64

M - 48

F - 16

Grade 9 11M/9F

10 15M/3F

11 7M/2F

12 14M/3F

Second Choice:

Accounting
Advertising
Architecture
Art
Auto Mechanics
Aviation
Banking/Finance
Broadcasting/TV
Chemistry
Clergy/Religion
Dentistry
Dramatics
Electronics
Engineering
Field Sports
Food management
Government
Journalism/Newspaper
Law Enforcement
Medicine
Music
Plumbing
Psychology
Seamanship
Sports/Recreation
Teaching/Sch. Adm.
Veterinary Medicine

Third Choice:

Accounting
Advertising
Agriculture
Architecture
Broadcasting
Chemistry
Construction
Dentistry
Dramatics
Electronics
Engineering
Field Sports
Government
Insurance
Journalism
Law Enforcement
Mechanical Drawing
Medicine
Military
Mortician
Music
Plumbing
Psychology
Purchasing/Marketing/Sales
Seamanship
Sports/Recreation
Telephone/Communication
Veterinary Medicine

First Choice: Law Enforcement

Total 11
M 9
F 2

Grade 9 3M/2F
10 2M/0F
11 2M/0F
12 2M/0F

Second Choice:

Banking/Finance
Construction
Fire Service/Rescue
Forestry
Military
Music
Sports/Recreation

Third Choice:

Agriculture
Broadcasting/TV
Conservation
Field sports
Government
Machinist
Music
Seamanship
Teaching/Sch. Adm.

First Choice: Machinist

Total 2
M 2
F 0

Grade 9 2 M

Second Choice:

Art

Third Choice:

Auto mechanics

Law

First Choice: Manufacturing

Total 15
M 2
F 13

Grade 9 0M/2F
10 1M/1F
11 1M/7F
12 0M/3F

Second Choice:

Art
Field sports
Journalism/Newspaper
Purchasing/Marketing/Sales
Social Service
Space/Physics
Sports/Recreation
Teaching/Sch. Adm.

Third Choice:

Accounting
Art
Camping, hiking
Chemistry
Field sports
Interior decorating
Sports/Recreation
Teaching/Sch. Adm.

First Choice: Mechanical Drawing

Grade		
Grade	9	1M/0F
	10	1M/0F
	11	1M/0F
	12	0M/0F

Total	3
M	3
F	0

Second Choice:

Auto Mechanics

Woodworking

Third Choice:

Camping/hiking

Field sports

First Choice: Medicine

Grade	9	16M/7F
	10	8M/11F
	11	13M/11F
	12	4M/4F

Total	74
M	41
F	33

Second Choice:

Accounting
Art
Broadcasting/TV
Chemistry
Clergy/Religion
Conservation
Dentistry
Engineering
Field sports
Government
Law
Military
Miscellaneous
Mortician
Music
Natural Science
Plumbing
Purchasing/Marketing/Sales
Psychology
Seamanship
Space/Physics
Sports/Recreation
Teaching/Sch. Adm.
Veterinary Medicine

Third Choice:

Art
Banking/Finance
Camping/hiking
Chemistry
Clergy/Religion
Dentistry
Electronics
Engineering
Field sports
Forestry
Insurance/Real Estate
Interior decorating
Journalism
Law
Law enforcement
Manufacturing
Military
Music
Mortician
Optometry
Plumbing
Psychology
Seamanship
Social Service
Teaching/ Sch. Adm.
Telephone/ Communications
Veterinary Medicine

First Choice: Military

Total 15
M - 15
F - 0

Grade 9 5M/0F
10 3M/0F
11 4M/0F
12 3M/0F

Second Choice:

Accounting
Aviation
Camping, hiking
Chemistry
Construction
Field sports
Law enforcement
Medicine
Mortician
Music
Pharmacy
Refrigeration/AC
Seamanship
Telephone/Communications

Third Choice:

Aviation
Banking/Finance
Broadcasting/TV
Electronics
Field sports
Forestry
Government
Insurance/ Real Estate
Law
Law enforcement
Medicine
Sports/Recreation
Woodworking

First Choice: Mortician

Total 1

Grade 9 1M

Second Choice:

Architecture

Third Choice:

Mechanical Drawing

First Choice: Music

Total 26
M 10
F 26

Grade 9 3M/7F
10 3M/5F
11 3M/3F
12 1M/1F

Second Choice:

- Broadcasting/TV
- Camping, hiking
- Clergy/religion
- Dramatics
- Electronics
- Forestry
- Law
- Military
- Music
- Seamanship
- Sports/recreation
- Teaching/Sch. Adm.
- Telephone/Communications
- Veterinary Medicine
- Woodworking

Third Choice:

- Agriculture
- Camping, hiking
- Conservation
- Construction
- Dramatics
- Field sports
- Military
- Miscellaneous
- Music
- Mortician
- Natural Science
- Pharmacy
- Psychology
- Social Service
- Teaching/Sch. Adm.
- Veterinary Medicine

First Choice: Natural Science

Total 6
M 4
F 2

Grade 9 1M/0F
10 0M/0F
11 1M/1F
12 2M/1F

Second Choice:

- Engineering
- Forestry
- Medicine
- Miscellaneous
- Psychology
- Social service

Third Choice:

- Seamanship
- Social Service
- Meteorology

First Choice: Optometry Total 1

Grade 12 0M/1F

Second Choice:	Third Choice:
Psychology	Law

First Choice: Petroleum Total 1

Grade 11 1M/0F

Second Choice:	Third Choice:
Woodworking	Seamanship

First Choice: Plumbing

Total 8
M - 3
F - 5

Grade 9 0M/1F
10 1M/1F
11 1M/0F
12 1M/3F

Second Choice:	Third Choice:
Aviation	Construction
Conservation	Law
Manufacturing	Medicine
Natural Science	Military
Psychology	Purchasing/Market./Sales
Social Service	Sports/Recreation
Teaching/ Sch. Adm.	Teaching/ Sch. Adm.

First Choice: Pharmacy Total 1

Grade 12 0M/1F

Second Choice:	Third Choice:
Natural Science	Chemistry

First Choice: Psychology

Grade	M/F		
9	1M/3F	Total	31
10	3M/7F	M	8
11	3M/8F	F	23
12	1M/5F		

Second Choice:

Accounting
Advertising/Public Relations
Art
Auto Mechanics
Clergy/Religion
Government
Interior decorating
Journalism-Newspaper
Law
Manufacturing
Medicine
Seamanship
Social Service
Sports/Recreation
Teaching/ Sch. Adm.
Telephone/Communications

Third Choice:

Architecture
Field sports
Forestry
Insurance/Real Estate
Interior decorating
Journalism/Newspaper
Law
Medicine
Miscellaneous
Natural Science
Optometry
Social Service
Sports/Recreation
Teaching/ Sch. Adm.
Telephone/Communications
Veterinary Medicine

First Choice: Purchasing/ Marketing/ Sales		Total	14
Grade 9	3M/0F	M	9
10	2M/2F	F	5
11	2M/1F		
12	2M/2F		

Second Choice:

Accounting
Architecture
Art
Dramatics
Field sports
Insurance/ Real Estate
Manufacturing
Mechanical Drawing
Medicine

Third Choice:

Broadcasting/TV
Field sports
Military
Music
Pharmacy
Sports/Recreation
Telephone/Communications
Veterinary Medicine
Woodworking

First Choice: Refrigeration/ Air Conditioning

Grade 9 4M/0F
10 8M/0F
11 9M/0F
12 7M/0F

Total 28
M - 28
F - 0

Second Choice:

Agriculture
Auto Mechanics
Conservation
Engineering
Field sports
Forestry
Machinist
Manufacturing
Mechanical Drawing
Military
Mortician
Pharmacy
Psychology
Refrigeration/AC
Seamanship
Sports/ Recreation
Woodworking

Third Choice:

Architecture
Auto Mechanics
Clergy/ Religion
Forestry
Law enforcement
Machinist
Military
Petroleum
Pharmacy
Purchasing/Marketing/Sales
Refrigeration/AC
Seamanship
Sports, recreation
Telephone/Communication
Woodworking

First Choice: Seamanship

Grade 9 5M/3F
10 4M/1F
11 3M/0F
12 2M/0F

Total 18
M 14
F 4

Second Choice:

Auto mechanics
Aviation
Clergy/Religion
Field sports
Law
Law enforcement
Machinist
Military
Psychology
Space/Physics
Sports/Recreation
Veterinary Medicine

Third Choice:

Camping/hiking
Field sports
Insurance/Real Estate
Law enforcement
Medicine
Natural Science
Petroleum
Psychology
Space/Physics
Sports/Recreation

First Choice: Social Service Total 22

Grade 9 0M/2F M - 2

10 1M/6F F - 20

11 1M/7F

12 0M/5F

Second Choice:	Third Choice:
Auto mechanics	Dramatics
Clergy/Religion	Field sports
Interior decorating	Government
Journalism/Newspaper	Interior decorating
Law	Journalism/Newspaper
Natural Science	Law
Psychology	Natural Science
Teaching/Sch. Adm.	Sports/Recreation
Veterinary Medicine	Telephone/Communications

First Choice: Space/Physics Total 3

Grades 9 1M/0F M - 3

10 1M/0F F - 0

11 1M/0F

12 0M/0F

Second Choice:	Third Choice:
Banking/Finance	Aviation
Electronics	Journalism/Newspaper
Music	

First Choice: Sports/ Recreation

Total 46
M - 30
F - 16

Grade 9 13M/3F
10 6M/2F
11 10M/8F
12 1M/3F

Second Choice:

Accounting
Advertising/Public Relations
Architecture
Art
Auto Mechanics
Broadcasting/TV
Camping, hiking
Clergy/Religion
Electronics
Engineering
Field sports
Law
Law enforcement
Manufacturing
Music
Mortician
Psychology
Teaching/Sch. Adm.
Telephone/Communications
Woodworking

Third Choice:

Accounting
Agriculture
Art
Auto mechanics
Aviation
Camping, hiking
Conservation
Construction
Dentistry
Engineering
Field sports
Insurance/Real Estate
Law Enforcement
Machinist
Medicine
Music
Pharmacy
Psychology
Space/Physics
Social Services
Teaching/Sch. Adm.
Veterinary Medicine

First Choice: Teaching/ School Administration

Total 65

M 3

F 62

Grade 9 0M/23F

10 1M/11F

11 2M/15F

12 0M/13F

Second Choice:

- Accounting
- Architecture
- Art
- Dramatics
- Interior decorating
- Law enforcement
- Manufacturing
- Medicine
- Music
- Plumbing
- Psychology
- Social Service
- Sports/recreation
- Veterinary Medicine

Third Choice:

- Accounting
- Agriculture
- Architecture
- Art
- Camping/Hiking
- Dramatics
- Graphic Art
- Interior decorating
- Journalism
- Law
- Manufacturing
- Miscellaneous
- Music
- Psychology
- Social Service
- Sports/recreation
- Telephone/Communications

First Choice: Telephone/ Communications Total 7

Grades 9 0M/0F M - 1
10 1M/2F F - 6
11 0M/2F
12 0M/2F

Second Choice:

Banking/ Finance
Forestry
Law enforcement
Social Service

Third Choice:

Camping, hiking
Journalism
Social Service

First Choice: Transportation Total 4

Grade 9 0M/1F M - 3
10 0M/0F F - 1
11 1M/0F
12 2M/0F

Second Choice:

Auto mechanics
Insurance/Real Estate
Mathematics
Social Service

Third Choice:

Advertising/Public Relations
Sports/Recreation

First Choice: Veterinary Medicine

Total 39
M - 20
F - 19

Grade 9 6M/5F
10 7M/6F
11 4M/3F
12 3M/5F

Second Choice:

Agriculture
Architecture
Aviation
Art
Broadcasting/TV
Camping, hiking
Dentistry
Field sports
Forestry
Law
Mechanical Drawing
Medicine
Miscellaneous
Mortician
Plumbing
Seamanship
Sports/recreation
Teaching/Sch. Adm.
Woodworking

Third Choice:

Architecture
Art
Camping, hiking
Conservation
Dramatics
Field sports
Forestry
Government
Interior decorating
Law
Medicine
Miscellaneous
Psychology
Seamanship
Social Service
Sports/Recreation
Woodworking

First Choice: Woodworking

Grade	9	3M/0F
	10	4M/0F
	11	4M/0F
	12	3M/0F

Total	14
M	14
F	0

Second Choice:

- Art
- Auto mechanics
- Construction
- Field sports
- Fire Service/Rescue
- Refrigeration/AC
- Social Service
- Sports/Recreation
- Transportation

Third Choice:

- Agriculture
- Architecture
- Auto mechanics
- Electronics
- Engineering
- Field sports
- Fire Service/Rescue
- Mechanical Drawing
- Military
- Pharmacy
- Seamanship

First Choice: Miscellaneous			Total	5
			M	2
Grade	9	2M/2F	F	3
	10	0M/1F		
	11	0M/0F		
	12	0M/0F		

Second Choice:	Third Choice:
Camping, hiking	Music
Clergy/Religion	Pharmacy
Veterinary Medicine	Sports/Recreation

TABLE CLVIII

Survey of Counseling Visits of
Ninth Grade Students Seeking
Information In Multiple Career Areas,
The Areas of Career Interest, and
Composite Number of Visits Made
To Counseling Fellow's Office For
Denoted Area In the Period
January 15, 1973 - May 15, 1973

Areas of Career Interest	No. of Ninth Grade Students Expressing Interest	Total Number of Visits Made To Counseling Fellow's Office For Denoted Areas
(Architecture, Airline Pilot)	1	2
(Art, Law)	1	2
(Pilot, Law, Professional Athlete)	1	4
(Nursing, Speech)	1	2
(Secretary, Special Education)	1	4
(Unknown, Heavy Equipment Operator)	1	5
(Child care, Writing, Public Relations, Literary, Advertising, Journalism)	1	7
(Shop owner, Social work, Teaching)	1	4
(Physical Therapy, Teaching)	1	8
(Agriculture, Education, Architecture, Professional Athlete)	1	8
Totals	10	46

TABLE CLIX

Survey of Counseling Visits of
Ninth Grade Students Seeking
Information In A Single Career Area,
The Area of Career Interest, and
Composite Number of Visits Made
To Counseling Fellow's Office For
Denoted Area In the Period
January 15, 1973 - May 15, 1973

Area of Career Interest	No. of Ninth Grade Students Expressing Interest	Total Number of Visits Made to Counseling Fellow's Office For Denoted Area
Agriculture	1	11
Air & Marine Crafts	1	1
Architecture	3	5
Astronomy	1	5
Auto Mechanics	3	6
Beautician	1	1
Clergyman	1	13
Dentistry	1	2
Engineering	1	2
Fashion Designer	1	2
Forestry	1	1
Herpetologist	1	2
Juvenile Authority	1	1
Law	2	4
Legal Secretary	4	4
Medical	1	1
Military	3	14
Music	3	7
Nursing	4	8
Oceanography	1	1
Pilot	1	1
Policewoman	1	2
Psychology	2	2
Secretary	1	3
Stewardess	1	2
Teaching	5	11
Transportation	1	6
Unknown **	9	32
Veterinary Medicine	2	3
Welding	1	5
Wildlife	1	2
Totals	60	160

** Survey of several areas ---- without a specific interest

TABLE CLX

Survey of Counseling Visits of
Tenth Grade Students Seeking
Information In a Single Career Area,
The Area of Career Interest, and
Composite Number of Visits Made
To Counseling Fellow's Office For
Denoted Area In the Period
January 15, 1973 - May 15, 1973

Areas of Career Interest	No. of Tenth Grade Students Expressing Interest	Total Number of Visits Made to Counseling Fellow's Office For Denoted Area
Accounting	1	1
Aviation	1	2
Bookkeeping	1	1
Biological Science	1	1
Business	1	2
Computer Science	1	2
Dentistry	1	1
Engineering	1	1
Marketing	1	1
Medical	2	2
Military	1	2
Nursing	1	2
Physical Therapist	1	2
Professional Hunting Scout	1	2
Psychology	1	1
Sales	1	2
Social Worker	1	1
Special Education	1	2
Stewardess	1	1
Survey (General)	11	16
Transportation	1	1
Veterinary Medicine	1	1
Welding	1	1
Totals	34	48

TABLE CLXI

Survey of Counseling Visits of
Eleventh* and Twelfth Grade Students
Seeking Information In a Single Career Area,
The Area of Career Interest, and
Composite Number of Visits Made
To Counseling Fellow's Office For
Denoted Area In the Period
January 15, 1973 - May 15, 1973

Area of Career Interest	No. of Eleventh and Twelfth Grade Students Expressing Interest	Total Number of Visits Made To Counseling Fellow's Office for Denoted Area
Bookkeeping	1	1
Computer Science	1	1
Dentistry	2	2
Florist	1	1
Forestry	1*	1
Law	2*-1	3
Marine Biology	1	1
Medical Technician	1	1
Military	1*	1
Nursing	4	4
Psychology	1	1
Refrigeration	1*	1
Secretarial	1	1
Social Work	1	1
Stewardess	1*	1
Survey (General)	1*-3	4
Veterinary Medicine	1	1
Wildlife Management	1	1
Totals	27	27

APPENDIX D

HN R. DENISON
PRESIDENT

PAUL J. MOSES
SUPERINTENDENT

ARTHUR L. GAYLE, JR.
VICE-PRESIDENT

CALCASIEU PARISH SCHOOL BOARD
ADMINISTRATION BUILDING
1724 KIRKMAN STREET
LAKE CHARLES, LOUISIANA 70601

Attn: Personnel Manager

Dear Sir:

Calcasieu Parish has launched out with a Career Education Pilot Program which entails an awareness at the elementary level, hands-on experiences at the middle school level, and specialization at the high school level. It is our intention to provide a salable skill for every child in Calcasieu Parish at the completion of high school.

Career Education includes a placement component for all exiting students as well as part-time placement for students during the school year where the need exists.

Enclosed is a Student Needs form whereby you may indicate the number of part-time, full time, and projected need of employees. If I am aware of your needs, it will enable me to screen the students and send you the students best qualified to fill the position.

I extend to you my services as a placement officer in this program. If you are in need of part-time employees at this time or in the future, I would appreciate your contacting me at 433-6321 extension 12.

Sincerely,

a L DeRouen

A. L. DeRouen
Placement Officer
Career Education

ALD:fh

Enclosure

INTERVIEW REPORT

Please complete this sheet for each person interviewed. (This information is for the Job Placement Center use and will be considered confidential.)

Check appropriate rating:

	Poor	Average	Good
Applicants knowledge of occupation for which he is being considered			
General appearance			
Attitude and ambition			

Please mark items that apply: (Inform applicant of result)

Applicant does not meet job qualifications ☐
Applicant is scheduled for additional interview ☐
Applicant will be notified if future vacancy occurs ☐
Applicant should contact us June 1, 1972 ☐

COMMENTS: ______________________________

____

____

Name of Student ______________ School Attending ______________

Skill / Occupation ______________

Interviewer ______________ Firm ______________

(Please deposit in designated box on information desk)

June 1972

Dear Graduate:

As a part of the Career Education Program of the Calcasieu Parish Schools, we would like to have the following information about our 1972 graduates.

(Please Print)
Name ____

Address ____

Phone ____________________

Age ______________________

Did you graduate in May? _____ Or will you graduate this summer? _______ From Barbe High School? __________________.

Are you working? ____________ How many hours per week? __________
Name of Company ____

Are you going to enroll in College in September? ________ If so, name of College ____

Please complete this information and return in the enclosed envelope as soon as possible. No postage stamp is necessary.

Sincerely,

A. L. DeRouen
Follow-Up Coordinator

GRADUATING SENIOR RECORD

for CAREER EDUCATION PROGRAM

e ________________ School ________________ Grade _____ Section __________
Last   Middle   First
ress ________________________________ Telephone ________________

__________ Age __________ Weight __________ Height ________________

gle ______________ Married ______________ Social Security No. ____________

her's Name ________________ Address ________________________

her's Name ________________ Address ________________________

her's Occupation ____

her's Occupation ____

ber of Brothers Living At Home ______ Number of Sisters Living At Home ______

es Tardy This Year ______ Reasons ________________________________

es Absent This Year ______ Reasons ________________________________

Advisor is ____________________ My Study Hall Period Is ____________

ase indicate most recent grades received in the following subjects:
lish __________ Math __________ Science ________________________
Specify Courses

ase check below the courses you have taken and give other information
uired:

	Grade Received	Teacher
kkeeping		
etarial Training		
ical Office Practice		
rthand		
ng I		
ng II		
E.		
ding Trades		
Mechanics		
metology		
ting		
Processing		
trical Trades		

Speed: __________
Speed & Accuracy
on 5-min
time __________

	Grades Received	Teacher
igeration-Air Cond.		
ing		
-TV		
t Metal		
ine Shop		
making		

r (Explain) ______________________________

you interested in permanent, full-time employment? Yes ______ No ______

you interested in summer employment only? Yes ______ No ______

you planning to continue your education? Yes ____ No ____ Full-time ______

-time ______ If yes, where? ______________________________

extracurricular activities while in high school:

______________ ______________ ______________

below any employment that you have had in the past or at present:

oyer	Address	Type of Work	Salary	Dates of Employment	Hours a week

resently employed do you plan to stay after graduation? Yes ____ No ______

nswer is No, Why? ______________________________

ou have transportation? Yes ____ No ____ Will you be riding the bus? Yes ___

____

ou have a driver's license? ____ Has it ever been suspended? ____ Are you now

r a doctor's care? ____ If so, explain ______________________________

lty References:

Name	School	Address

____

Signature

BEST COPY AVAILABLE

CALCASIEU PARISH SCHOOL BOARD
ADMINISTRATION BUILDING
1724 KIRKMAN STREET
LAKE CHARLES, LOUISIANA 70601

As a part of the Career Education Program in the Calcasieu Parish Schools we would like to initiate an Occupational Placement Day for graduating seniors seeking full-time employment.

We anticipate that this would be of interest and benefit to your company.

The students seeking employment will be pre-screened and appointments set according to your specifications.

You can interview as few or as many as you indicate and send as many interviewers as you desire.

We shall schedule these interviews starting at __________ until __________ on the Alfred M. Barbe High School Campus. There will be a lunch break from ________ until __________.

Please indicate on the enclosed sheet your needs and desire to participate.

Sincerely,

A. L. DeRouen
Placement Officer
433-6321 Ext. 12

ALD/fh

Enclosure

BEST COPY AVAILABLE

#2

THE AGE DISCRIMINATION IN EMPLOYMENT ACT of 1967 prohibits discrimination on the basis of age with respect to individuals who are at least 40 but less than 65 years of age.

OYMENT APPLICATION

AN EQUAL EMPLOYMENT OPPORTUNITY EMPLOYER

ME — LAST — FIRST — MIDDLE — DATE

RMANENT DRESS — NO. & STREET — CITY — STATE — TELEPHONE

MPORARY DRESS — SOCIAL SEC. NO.

IDEN NAME IF RRIED OR DIVORCED

TIFY IN ERGENCY — RELATIONSHIP

DRESS — TELEPHONE

NAME	RELATIONSHIP & AGE	NAME	RELATIONSHIP & AGE

CHECK IF APPLICABLE

☐ SINGLE
☐ MARRIED
☐ DIVORCED
☐ SEPARATED
☐ WIDOWED
☐ REMARRIED
☐ MALE
☐ FEMALE
☐ RENT
☐ OWN HOME
☐ U.S. CITIZEN
☐ EVER ARRESTED

PHYSICAL CONDITION

☐ EXCELLENT ☐ GOOD ☐ FAIR

HEIGHT ____________ WEIGHT ____________

AGE ______ BIRTH DATE ____________

YSICAL FECTS

ER DRAWN WORKMAN'S MPANSATION — WHY — WHEN

SITION SIREC — SALARY DESIRED — DATE AVAILABLE

CLE HIGHEST GRADE COMPLETED	GRADE SCHOOL 1 2 3 4 5 6 7 8	HIGH SCHOOL 9 10 11 12	COLLEGE 1 2 3	4 5 6
ADE HOOL		X X X X	X X X	X X X
		COURSE-DEGREE	YR. GRAD.	AVE. GRADE
H HOOL				
LLEGE				
ADUATE HOOL				

HER

HER TRAINING AND LLS-MACHINES AND FICE EQUIPMENT ERATED

ANCH OF SERVICE — DATE ENTERED — DATE DISCHARGED — SERVICE NUMBER

AL NK — MILITARY SPECIALTY — SELECTIVE SERVICE, RESERVE, OR NATIONAL GUARD STATUS

LATIVES WORKING W-K-M

NAME	POSITION	BUSINESS ADDRESS & TELEPHONE

BIES, SPECIAL INTERESTS, OLASTIC HONORS, LLEGE ACTIVITIES, PROF. BERSHIPS

EMPLOYMENT RECORD

List all employment starting with present or most recent employer.

Account for all periods including unemployment and military service. Attach additional sheet if necessary

DATES MONTH-YEAR	EMPLOYER NAME AND ADDRESS	JOB TITLE DEPARTMENT NAME OF SUPERVISOR	DESCRIBE MAJOR DUTIES	RATE OF PAY	REASON FOR LEAVING
FROM				STARTING	
TO				ENDING	
FROM				STARTING	
TO				ENDING	
FROM				STARTING	
TO				ENDING	
FROM				STARTING	
TO				ENDING	
FROM				STARTING	
TO				ENDING	
FROM				STARTING	
TO				ENDING	

INTERVIEWER'S COMMENTS	Unsatisfactory	Questionable	Satisfactory	Very Good	Superior
APPEARANCE					
MENTAL ALERTNESS					
ATTITUDE					
AMBITION					
CAPACITY FOR DEVELOPMENT					
SUITABILITY FOR EMPLOYMENT					

PRE-EMPLOYMENT STATEMENT

It is understood and agreed that any misrepresentation by me in this application will be sufficient cause for cancellation of the application and/or separation from the Company's services. I hereby authorize any person or concern to furnish information in their possession concerning my former employment, and I hereby release such person or concern from any and all liability arising therefrom.

I agree to submit myself, upon request for physical examination by the Company's physician, and understand that, failing to pass said examination, I will not be employed by the Company.

I also understand and agree as a term and condition of employment that no assignment of my salary, wages, or other compensation, or any part thereof, will be binding upon the Company unless such assignment is accepted in writing on behalf of the Company by its duly appointed representative.

Applicant's
Signature ______________________ Date __________

CALCASIEU PARISH SCHOOLS

Employer Report on Students Needs in Selected Occupations

Employer's Name____________________

Address____________________

____

Industry____________________

Information reported on this form is strictly confidential, and will not be revealed to any unauthorized person nor published in such a manner that data related to any individual company can be identified.

Date____________________

DOT Code	Occupation	Total Employment 1972		Projected Employment 1973		No. of Current Job Vacancies		Skill Requirement
		Full-Time	Part-Time	Full-Time	Part-Time	Full-Time	Part-time	

1. Based on your experience in the past year, estimate the number of workers you will have to replace in the next 1 or 2 years because of promotions or because of workers leaving the labor force for reasons such as death, retirement, disability, fired, or entry into Armed Forces.

2. The Interviewer will point out to each employer the data will be used for placement purposes only. Also the interviewer will use question (1) as the basis to secure his/her information. The line above occupation will be used to note the job cluster, the space below will identify the job.

CALCASIEU PARISH SCHOOL BOARD
Career Education Job Placement

HOW TO LOCATE A JOB

Employment Agencies: Public

Louisiana State Department of Labor
Employment Security
1028 Enterprise Boulevard
Lake Charles, Louisiana 70601
Phone: 439-9051

Employment Agencies: Private

Private employment agencies are private businesses licensed by the State of Louisiana. They are in business for profit; therefore, they may charge you if you accept a job that they find for you.

Usually the fee for employment on a full-time job is approximately 40% to 50% of your first month's salary. For example, if your salary is $400 a month, you will have to pay the agency a total of $160. Usually the fee for a part-time job is less. Many times the employer will pay the fee for the job to the employment agency, and there will be no charge to you.

Be sure to read carefully any paper you are asked to sign. Make sure you understand the exact amount you will be required to pay and when the payment will be due BEFORE you sign your name or accept a job.

For a list of Lake Charles' private employment agencies, check the yellow pages in the phone directory under "Employment Agencies."

Newspapers

Newspapers are one of the best sources for immediate job information. Jobs are listed under several headings--Help Wanted, Male or Female, Professional Employment, Sales Help and Part-time or Temporary. Be sure to follow up the leads immediately. Remember, there are other people looking also.

HOW TO LOCATE A JOB (Cont'd.)

School

Job Placement in Career guidance offices, Counselors, Teachers, Principals.

Others

Friends, relatives, and business firms--personnel departments.

CALCASIEU PARISH SCHOOL BOARD
Career Education Job Placement

HOW TO APPROACH AN EMPLOYER

Be prepared when you go job hunting. Have the information readily at hand to answer any questions written or verbal that an employer might ask. Remember, BE PERSISTENT! After a few "no's" any job seeker may become discouraged. Should this happen to you, try to increase your contacts with employers. Working hard at finding a job makes you feel that you are an integral part of the "Working World" rather than part of the unemployed. Your job now is "seeking a job."

Here are some helpful tips from employers:

1. Apply for a specific job--don't be vague about the position for which you are applying. But, if there is no opening--you may want to indicate to the employer that you would be willing to start in another position.

2. Indicate that you are willing to learn. This approach will be more beneficial in placing you than the cut and dried--'I can do this and nothing else' approach.

3. If you are going to a large company, be sure you apply with the appropriate person for the job you are seeking. For example, one personnel department may hire only professional workers--another personnel department may work with skilled or unskilled personnel.

4. DO NOT GO IN GROUPS to apply for a job. GO ALONE!

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Career Education Job Placement

THE INTERVIEW

The Interview is the final and most important step in your job campaign. Don't dread the interview--it will give you your opportunity to discuss your qualifications for a position.

Try to prepare yourself for any questions the employer might ask. Also, you think about questions you will want answered concerning the position. Here are some helpful tips:

1. Groom yourself. Remember first impressions are important.

2. Arrive at the interview a few minutes earlier than your appointment. If there is a receptionist or secretary, tell her who you are and give the name of the person you are to see.

3. Be cheerful and polite.

4. Speak clearly, listen carefully and be interested.

5. Your answers should be to the point, but more than yes or no. Try to make the interview interesting, but don't get too carried away. Remember the employer's time is valuable.

6. Leave your cigarettes and chewing gum hidden at home.

7. Know something about the position for which you are applying.

8. Look for clues when the interview is over. Usually an employer will ask, Do you have any more questions? "This is probably a good time to say, "No, thank you, but I enjoyed our interview and hope that you will consider me for the position with your company."

9. Look directly at your interviewer. When the top of your head is all that can be seen, its hard to determine your interest, appearance and enthusiasm.

10. Be on your best behavior from the minute you enter the building for the interview until you leave. Other persons, such as the receptionist, might be called on to give their opinion of you or what your reaction was while you waited to see the personnel manager.

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Career Education Job Placement

Questions Frequently Asked During the Employment Interview

1. What are your future vocational plans?
2. How do you spend your spare time?
3. In what type of position are you most interested?
4. Why do you think you might like to work for our company? (If possible, obtain information about company before interview)
5. What qualifications do you have that make you feel that you will be successful in your field?
6. Why do you think you would like this particular type of job?
7. Are you looking for a permanent or temporary job?
8. Do you prefer working with others or by yourself?
9. Can you take instructions without feeling upset?
10. Can you get recommendations from previous employers?
11. Have you had any serious illness or injury?
12. Do you like to travel?
13. How about overtime work?
14. What have you done which shows initiative and willingness to work?

DO'S AND DON'TS FOR JOB SEEKERS

stress your qualifications for the job
recount experience you have had which would fit you for the job
talk and think, so far as possible about the future rather than the past
indicate where possible, your stability, attendance record and good safety experience
try to learn ahead of time about the company and its products
assume an air of confidence

approach the employer with respectful dignity
try to be optimistic in your attitude
maintain your poise and self-control
try to overcome nervousness or shortness of breath (it helps to take a deep breath)
hold yourself errect

apply for a specific job or jobs

answer questions honestly and with straight-forwardness
stress the contribution you can make to the enterprise
have available a list of former employers, time and period of service
have a list of references

let as many people as possible know you are "job hunting"
make plenty of applications

be well-groomed and appropriately dressed

DON'T keep stressing your need for a job
DON'T discuss past experience which has no application to the job
DON'T display overconfidence

DON'T cringe or beg for consideration

DON'T speak with muffled voice

DON'T be one of those who can do anything
DON'T hedge in answering questions

DON'T ask your questions about hours, pay, etc. early in the interview
DON'T hesitate to fill our applications, give references, take physical examination or tests on request
DON'T hang around, prolonging interview, when it should be over
DON'T arrive late and breathless for interview
DON'T be a "know it all"

DON'T keep yourself from contacts who might help you find a job
DON'T feel that the world owes you a living
DON'T make claims if you cannot deliver on the job
DON'T display a feeling of inferiority

DON'T depend upon the telephone for your job
DON'T be untidy in appearance

CALCASIEU PARISH SCHOOL BOARD
Career Education Job Placement

PRE-EMPLOYMENT TESTS

A Word About Tests

Since you first began school you have been taking tests and will continue to take tests when you apply for certain jobs, enter the military service, enter college or even get a driver's license.

Basically, there are two types of tests:

1. I.Q., aptitude, and achievement which are used to help determine if you have the intelligence, ability, potential, and educational background to pursue a certain job or career.
2. Inventory tests measure your interests, values, and attitudes. These tests aid in the evaluation of your desires, goals, and personality traits. These inventories can be used in comparing you to other people who are successful in a chosen career.

One test score cannot necessarily tell you all you or an employer wants to know about you. But often, a combination of test results may give some indication of your basic skills and interests. (Always read instructions carefully before you start--some tests have a time limit.)

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Career Education Job Placement

THE APPLICATION

Most employers have their own application form.* The amount and type of information requested may vary somewhat from employer to employer. Here are some hints that you might recall when filling out an application:

1. Carry your own pen or pencil. This gives the impression that you've come prepared.
2. Complete all information--do not skip anything. For example, if you do not have a phone in your home, put the number of a relative's or neighbor's phone and indicate to whom it belongs.
3. Complete the form as neatly as possible. A messy application is hard to read and does not give a good "first impression." A line drawn in an answer blank will indicate that you have no answer for questions which do not apply to you.
4. Almost all applications ask for a social security number. Make sure you know your number or have the information with you. If you don't have one, be sure you apply for your number at the local Social Security Office.
5. If you forget key information such as names, dates and addresses or you have trouble spelling them correctly, try carrying a summary sheet of this information with you when you go job hunting. (Complete application in reasonable time)
6. Be honest--don't lie or give false information. It may cost you your job when the truth is found out. (Polygraph used by some firms)

A Word About References

Almost all potential employers will ask you for several references. Select the people you want to use carefully. Be sure to ask their permission so they will not be caught off guard when an employer calls about you. (Be sure to use references who will return request)

In addition to their proper name and title, you will need to list their business address and phone number.

It is best to use former employers; but until you have some work experience, your references might be limited to a principal, counselor, teacher, or someone who knows you and knows the kind of person you are.

*The forms contain all the questions which he must have answers for before he can consider anyone for employment. Just as it takes time for you to complete the application, it takes time for him to read them. But, he does read them!